

127638
OBSERVATIONS

ON THE 234

Small Pox:

OR, AN

ESSAY

To discover a more Effectual

METHOD of CURE.

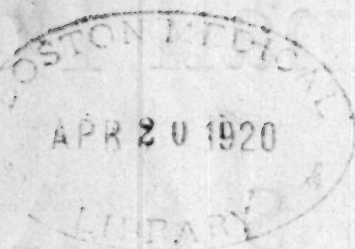
By *RICHARD HOLLAND*, M. D.
Fellow of the COLLEGE of PHYSICIANS
and the ROYAL SOCIETY.

Ἐσὸδω χρέω πυκνῶς, ἐπισκίπτειο ἐπιμελέσειον, τοῖσιν
ἀπατιομβροῖσιν ἐπὶ τὰς μεταβολὰς ἀπαντῶν. *Hippocrat.*
§. x. αὐτὴ Ἐυχνημοσιῶης.

Ne quid Falsi dicere audeat, ne quid Veri non
audeat. *Cic.*

L O N D O N:

Printed for *JOHN BRINDLEY*, Bookbinder
to her MAJESTY, at the *King's Arms*
in *NEW-BOND-STREET*. 1728.



12.7638

THE BOSTON MEDICAL SOCIETY
OF THE CITY OF BOSTON
M.D.

THE BOSTON MEDICAL SOCIETY
OF THE CITY OF BOSTON
M.D.

THE BOSTON MEDICAL SOCIETY
OF THE CITY OF BOSTON
M.D.

TO THE
QUEEN.

MADAM,



Would not have presumed to desire the great Honour of Addressing this short Discourse to YOUR MAJESTY; had I not attempted

DEDICATION.

tempted to make some Improvements in a learned Profession, and endeavoured to distinguish Truth from Error: A glorious Cause, which is sure to find the Patronage and Protection of our most discerning QUEEN.

Having often seen with Concern the Destruction occasion'd by the Malignity of the *Small Pox*, I could no longer resist the Dictates of Humanity; nor forbear to offer my Assistance, where I thought I was capable of lending a helping Hand to
my

DEDICATION.

my Fellow Creatures in such a calamitous Circumstance.

It was of the utmost Importance in this Disquisition, to make some useful Discoveries; which, though delivered with the greatest Modesty and good Manners, may perhaps offend a few Physicians of great Business and Interest.

To whom therefore should I appeal for an impartial Judgment in this Cause, but to that QUEEN who has in this very Dis-temper shewn a generous Con-
cern

DEDICATION.

cern for his MAJESTY's Subjects; and, by the Choice of her Physician, given a distinguishing Mark of her Sagacity in Physick?

AS YOUR MAJESTY is the illustrious Patroness of Arts and Sciences, and so justly merits the Admiration of Men of Learning; 'tis Duty, not Presumption in them to make their Acknowledgments, by directing all Addresses of this Kind to that AUGUST PRINCESS, to whom they of undoubted Right belong.

Permit

DEDICATION.

Permit me therefore, MADAM, to lay these Observations at YOUR MAJESTY'S Feet; which, however unworthy, may become considerable, if they have the good Fortune to meet with your Royal Favour and Encouragement.

May our Art be glorious, in long preserving to YOUR MAJESTY and our most gracious SOVEREIGN an uninterrupted Health: The greatest Comfort this Life can afford to YOUR MAJESTIES, and a most valuable
Blessing

DEDICATION.

Blessing to an obedient and
happy People.

These, may it please YOUR
MAJESTY, are the sincere
Wishes of,

MADAM,

Your MAJESTY'S

most Dutiful,

most Humble, and

most Devoted Servant,

RICHARD HOLLAND.



PREFACE.



*THE just Apprehensions
of the too often fatal
Tendency of the Small
Pox, induced me to
examine more carefully into the
Nature of the Distemper, if
happily I might discover some
Remedy for so great an Evil.*

B

In

ii P R E F A C E.

In order thereto, I first diligently observed the Effects of this Distemper amongst the Poor, when left entirely to Nature.

I next reflected on the different Methods of Cure used by Physicians, and the Manner of Treatment by the Nurses; and really found that the Women, by constant Attendance and Observation, had much better Notions of the Disease than I could have imagined.

I did not think it too much Trouble or Condescension to make particular Enquiries of the Nurses concerning

P R E F A C E. iii

concerning the Changes and Alterations that happened in my Absence; and I must own, that by this strict Method of Observation, one Patient has given me more Light into this Distemper, than I could gain from visiting twenty in the common Way.

Lastly, I read with the utmost Care the best Writers on this Subject, and seriously reflected on their several Methods of Cure; and confess I have been often surprised to find by this Review, that I had forgot, or overlook'd several good Observations in Books, which I thought I was perfectly acquainted with.

This has afforded me an useful Reflection in Philosophy, that I should examine my self, and not be opiniatre, and has convinced me that I am not too old to learn.

I am willing to flatter my self, that these Papers may furnish my Brethren with some useful Hints; and shall think my Pains well bestow'd, if I can by any Means contribute to the Improvement of my Profession, and the Relief of Mankind in such a terrible Calamity.

*'Tis a great Misfortune that
this*

P R E F A C E. v

this Distemper was unknown to the Ancients, else we might have expected from them an exact History and judicious Observations on every Part of the Disease.

They very well knew that the Art of curing Diseases was not to be learnt but by frequent Attendance on the Sick, unwearied Patience, judicious and diligent Observations of the several Turns of the Distemper, as well as the Effects and Alterations made by the Medicines.

Hæc Praxis olim grande Decus sacrae
Adduxit Arti; sic Veterum stetit
Secura

vi P R E F A C E.

Secura Fama; sic præivit
Hippocrates, meruitque Cœlum.*

By this Method, and by these Means, the great Hippocrates was enabled to make those solid Observations, that have stood the Test, and been the Admiration of the Learned in all Ages; and will still continue to be faithful Guides to all that can make Use of them, as long as human Bodies and Nature itself remain.

I hope, says the famous Boerhave, that the malign Influence of the Small Pox; and the great

* Ode ad Syd. Mus. Angl.

Havock it makes amongst Mankind, notwithstanding the common Methods of Cure, will excite some good Physician to consider more carefully the Nature of the Distemper, and find out some Way to check this Evil at the Beginning, vulgata quippe Methodo nullus nisi sponte emergit.*

This Observation is of the utmost Importance in this Disease, which all good Physicians have wisely foreseen, and (when they have been called soon enough) always had the greatest Regard to the Distemper before the Erup-

* Boerh. de Variolis.

viii P R E F A C E.

tion, and have ordered Bleeding, Vomits, Purges, Blisters, &c. as they judged most proper to prevent succeeding Dangers; happy if the Success had answered their best Endeavours to preserve the Blood, now but little infected, from the Malignity of the Contagion.

But our famous Sydenham happily introduced a Medicine (I mean Spirit of Vitriol) which, as he says, did Miracles in this Distemper, even after the Mass of Blood was infected by the most malignant Sort of Small Pox he in his great Practice ever saw; and therefore it must needs be a
powerful

P R E F A C E. ix

*powerful Remedy to resist the
Inflammation and Putrefaction in
the Beginning.*

*This he mentions in his E-
pistle * to Dr. Cole: and ad-
vises to drink plentifully of small
Liquour acidulated with this
Spirit till all the Small Pox ap-
pear.*

*If therefore it will appear more
fully by and by, we have so good
Authority, both from Reason and
Experience for the Efficacy of this*

* Dissert. Ep. p. 54.

x P R E F A C E.

Remedy, I don't see how the Gentlemen of the Profession can excuse themselves for disusing it; but by positively asserting, that they have often and carefully try'd it, but did not find it answer the Character given of it.

This Assertion, I own, may be satisfactory to those who have an implicit Faith in great Names; but will prove of little Weight, if carefully considered by others that are unprejudiced.

For first, If either through Prejudice, Humour, a Fondness for other Medicines, or Negligence in observing its Effects, they
have

P R E F A C E. xi

have not given sufficient Quantities, not often enough repeated it, or ordered it improperly; as was the Case, no longer since than the last Century, of a famous Remedy; I say, if they have failed in any of these Conditions the Fault may be not in the Medicine, but the Prescriber.

Secondly, This Answer proves too much or too little, that is nothing at all; for it will serve equally to condemn any Medicine the best in the World, as was notorious in a remarkable Instance of that noble Remedy the Peruvian Bark, which, after all Europe had seen its wonderful Effects, was yet

xii P R E F A C E.

*condemn'd by the most eminent Physicians at Paris, as well as several amongst our selves * here in London. So that we see Humanum est Errare: No Body is infallible; and this Medicine, as well as the Bark, may still be of the greatest Consequence to the Publick.*

Physick is a most noble and useful Science, when directed to

* They rashly, says Dr. Moreton, and without sufficient Experience, condemn'd this noble Medicine, pretending at the same Time they were nice Judges, and careful Observers of it Effects. *Pyretol. p. 121.*

Dr. Sydenham relates, that the Bark by being given improperly to an Alderman and an Apothecary, who both died, was condemn'd and quite disused. *Ep. Resp. p. 18.*

the

P R E F A C E. xiii

the Godlike End of restoring the afflicted in Sickness and Distress. What can be more delightful to a Man that has any Humanity? What more worthy of us as we are Men, and as we are Christians, than to be thus continually spending our Time, in order to relieve Mankind in some of the greatest Misfortunes that can befall them, Sickness and Pain? He that is sick to the Purpose will be sensible of what I say; and those Physicians, whose Genius and a good Inclination go along with their Profession, will find their Hearts attest this or much more.

When

xiv P R E F A C E.

When I had finished these Papers, I desired the Opinion of some ingenious Gentlemen, whose Judgment I could depend on; and who, I knew, were too sincerely my Friends to flatter me in an Affair of this Importance. They did me the Honour to approve of the Observations in general, but question'd my Prudence in venturing to publish them.

They told me it was a bold Undertaking, and apprehended, that by doing Justice to the Generality of Physicians, I might alarm a powerful Party, who perhaps had Interest enough to prejudice

P R E F A C E. xv

prejudice me in my Profession.

But as I am persuaded these Papers may have their Use, since my Design is fair and honest, I have Courage enough to publish them; and commit my self, as a celebrated Author expresses it, with all my Imperfections on my Head, to the Mercy of the Town.

After all, I expect that Multitudes who are led by the Vogue of the Town, besides others that are interested; without entring in to the Merits of the Cause, or examining whether the Reflections
I have

xvi P R E F A C E.

I have made on Physick are just or not, will condemn me for differing from those, which they think should know much better.

But I would only beg these impatient Gentlemen, that have already taken a Prejudice against me, to suspend their Censure 'till they have gone through this short Essay; then perhaps they will find Reasons why Men of the greatest Learning, Practice and Reputation, may by these very Advantages be obstructed in making Discoveries in the Art of Physick.

If these Gentlemen are not very conscientious they have no
Tempta-

Temptation to spend their Time in observing the various Turns of a nauseous Distemper, when they may enjoy the fresh Air, and make much more Profit by driving away to another Patient.

On the contrary, the Physicians who have not yet the good Fortune to be established in the Opinion of the Town, have nothing to support their Characters, but their Diligence and Watchfulness of every Symptom; they must distinguish carefully betwixt the Efforts of Nature which they should assist, and those of the Distemper which they are to de-

D

stroy

xviii P R E F A C E.

stroy. It is not sufficient for them, that their Patients die according to Art ; they must invent new Methods to save them when the common Practice is ineffectual ; and yet if the Distemper is too violent to be conquered notwithstanding all these Endeavours, their Reputation is in Danger.

But the People of this Age have been quick-sighted enough to see through the grave Forms and Appearances, that like a Masque obscur'd the Judgment of their Forefathers ; and have given a very remarkable Instance of their Discernment, by the extraordinary Encouragement a very ingenious

P R E F A C E. xix

nious and deserving Physician,
an old Acquaintance of mine,
has met with, who has but late-
ly appeared amongst them.



OBSER-



OBSERVATIONS

ON THE

Small Pox, &c.

CHAP. I.



THE Subject of the following Discourse has naturally led me into the Proof of some Truths, which may perhaps be disagreeable to those Gentlemen who undertake more Patients than sometimes they have Leisure to attend: as I have shewn that 'tis often necessary in a bad *Small Pox*, not only to understand the present

2 OBSERVATIONS *on the*

present State of the Distemper, but to consider carefully, and know how to guard against future Accidents; for since a Physician can't attend the various Turns of the Disease, he must prescribe different Remedies, and give himself the Trouble to instruct how to manage in his Absence; else, which too often happens, the Patient may be unexpectedly lost.

Whatever some People may think; this seems to me an Affair of such Consequence, that I must own I don't pretend to take Care of a Patient in a bad Case, without the Assistance of an experienc'd and understanding Nurse.

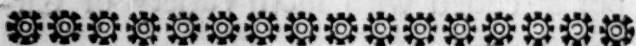
Hence it will follow, that those Physicians who are in a great Hurry of Business, are thereby often incapacitated; and that others, who have more Leisure, are better qualified to do Service in a Distemper

per attended with such Variety of Circumstances.

And since Business is unequally divided, I think it is but common Justice to the greatest Part of the Profession, and those who may want their Assistance, to mention this necessary Consequence.

I know there are some, truly great Men, who often refuse those which their Time will not permit them carefully to attend; but as Self-Interest is so prevailing a Passion in human Nature, I am not so much surpris'd, that Physicians should undertake, as that Patients should desire to employ those that have not sufficient Leisure to take proper Care of them: Especially, since his Majesty's Royal College has furnish'd most Quarters of the Town, with as able and judicious Physicians as perhaps the World can produce.

4 OBSERVATIONS *on the*



C H A P. II.

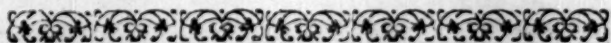
THERE is not a more useful or desirable Member in a Commonwealth, than a judicious and well disposed Physician.

'Tis a laudable Ambition and Matter of great Difficulty, really to deserve that excellent Character.

He should be well vers'd in Anatomy, Animal Oeconomy, and the History of Diseases; he must be acquainted with the Practice of the most able Physicians, Ancient and Modern; know something of Pharmacy; observe carefully the Effects of Medicines; and from all these Requisites, be capable of forming the most judicious Reflections.

So

So that, as the ingenious * Dr. Quincy observes, *the true and only Secret in Physick, is, How to give a Medicine, and not how to make it: and that will always remain so to those, who are unacquainted in the necessary Præcognita, which is a vast Compass of natural Knowledge.*



CHAP. III.

THE learned *Baglivi* gives excellent Advice to Physicians, when he bids them follow the Method of Astronomers; who draw their Conclusions from Observations really founded in Nature.

Their Art, says he, consists in this. First they observe diligently the *Phæ-*

* Pref. to Pharmacop.

6 OBSERVATIONS *on the*

nomena of the Celestial Bodies: and after these are exactly delineated in a Geometrical Manner, and learnedly examined by those that are Judges in these Things; then they are able to foretel the Motions, Sites, Conjunctions, &c. of those Bodies with all imaginable Certainty; so that though they compose different Systems of the Heavens, that contradict and clash with one another, as that of *Ptolemy*, *Copernicus*, *Tycho Brahe*, &c. yet in foretelling the Motions of the Stars, computing the Eclipses, and various Aspects of the Planets, none of them either differ or fail.

The Mystery of which Affair lies in this: That all Astronomers, though they conceive to themselves different Theories, have drawn them from the same constant Observations of the Celestial Bodies. For whatsoever one has observ'd, the others still must have observ'd the same; so that though the Reasons they

6

give

give for these Appearances consisting only in Opinion, will vary, and may be fallacious; yet the Things observed really existing in Nature, the Inferences that are drawn from them by Rules as certain, must always be true, though the Hypotheses be false.*

The same ingenious Author says, a Physician that undertakes the Cure of the *Small Pox*, ought to have a great Deal of Prudence and Patience, and must religiously observe the Motions of Nature; else fatal Mistakes will be committed.

Again, The Eruption of the *Small Pox* is the Work of Nature, which we must watch and assist by proper Medicines; and be cautious, lest by improper Applications we disturb it's Motions.

I shall therefore in Imitation of the Astronomers, as *Baglivi* advises, lay be-

* De Praxi Med. p. 106.

8 OBSERVATIONS *on the, &c.*

fore the Reader the best Histories and Observations I am able, in order to discover more fully the Nature of the Distemper.

'Tis not to be conceived, how far a serious and frequent Reflection on Books or Practice will conduct a Man in the Knowledge of Diseases, and the Operation of Medicines; for I have often been pleased to find my Notions of this Distemper much improved even by Writing this little Treatise; as I have occasionally heard some of the most judicious Observations on the nicest Parts of Physick, from a Gentleman who has seen very little Practice, but observes and thinks more than many of the Profession.



C H A P. IV.

*An ACCOUNT of the SMALL
POX from the Arabians by
Dr. Freind.*

THERE is one Thing, says Dr. *Freind**, of the greatest Importance first taken Notice of by the *Arabian* Writers, I mean the History of the *Small Pox*. For perhaps from the Time of *Hippocrates* to this very Period, there never happen'd any Thing so remarkable in Physick, as the Appearance of this new and surprising Distemper. The Original of which may be traced up from their own Authors much further backward, than is commonly imagin'd, even

* *Freind's Hist. of Physf. part. 2. p. 188. &c.*

10 *An ACCOUNT, &c.*

up to the famous Epoch of *Mahomēt* himself, in the Beginning of the *seventh* Century. The *Measles*, which no doubt were of the same Age, (call'd not improperly by *Avicenna*, *Variola Cholerica*) they look upon as a Disease so near a-kin to the *Small Pox*, that they generally treat of them both together, as if the greater included the less. This was a Distemper, without Dispute, unknown to the *Greeks*, whatever some of the Moderns have said to the contrary; and *first* observ'd in this Nation, and describ'd by the *Mahometans*.

By the earliest Account we have of the *Small Pox*, we find that it first appear'd in *Ægypt*, in the Time of *Omar* Successor to *Mahomet*; tho' no doubt, since the *Greeks* knew nothing of it, the *Arabians* brought it from their own Countrey, and might derive it originally from some of the more distant Regions of the *East*. For the oldest of their
Writers

Writers do not speak of it as a Distemper, which had taken its Rise very lately. And as this People in less than *thirty* Years did propagate their Religion and Empire, so did they no less this modern Evil, not only thorough *Ægypt*, but *Syria*, *Palestine*, and *Persia*, and a little while after through *Lycia*, and *Cilicia*: And in the very Beginning of the next Century farther into the Maritime Parts of *Africk*, and cross the *Mediterranean*, even into *Spain* it self.

Here indeed is a new Field in Physick. I will only give you a short Plan of this Disease, as it lies in their own Authors, and especially in one of the oldest and best of them, *Rhazes*; the *first* indeed, as he says himself, who wrote any distinct or exact Treatise upon this Subject. To begin then in his Method; as the Evil was unheard of before, so he assign'd a Cause as intirely new in Physick, a Sort of an *innate Contagion*. This

is

12 *An ACCOUNT, &c.*

is a *Ferment* in the Blood, like that in *Must*, which purifies it self sooner or later, by throwing off the peccant Matter at the Glands of the Skin: An *Hypothesis* since apply'd, though upon very slight Grounds, to *Fevers* in general by many Moderns. This *Ferment* he suppos'd to be deriv'd from the Mother in the *Womb*; which is the Reason why the Disease is so universal, and so equally incident to all. It is most epidemical in *Spring* and *Autumn*, especially after a wet Summer, or a warm Winter: Children and Adults are most subject to it; old Age but seldom, unless in a very pestilential Season. Corpulent flabby Bodies, which abound in Humours, and which have been us'd to much Wine or Milk, receive the Infection soonest; they who are of this dry Habit of Body, and of a *bilious* Constitution, are more apt to have a more violent Sort.

The fore-running Symptoms of this
Distemper.

Distemper, are, an acute Feaver, violent Pain in the Head and Back (the last particularly a sure Sign) Dryness of the Skin, Heaviness, Difficulty of Breathing, frightful Sleeps, Redness of the Eyes, pricking all over the Body, yawning, stretching, Pulsation and Weight in the Head, Sickness, and Inclination to vomit. Great Pain in the Back, violent Sickness, Restlessness and Burning all over the Body, and a high flaming Colour, especially about the Throat, Signs of an ill Sort. He calls the Pustules * either *sublimia*, which must be *distinct*, pointed or rising high; or *lata*, flat and broad, as in the *confluent* Kind. Many of these Symptoms are common to the *Measles*; and if the Heat is more intense †, and the Straitness and Oppression extremely great, especially if there be a Cough, and itching of the Ears and Nose, 'tis rather a Sign of this last Distemper: which is

* Ad Almanz. 10, 18. † Division. lib. 1. 159.

F sometimes

sometimes more dangerous than the *Small Pox*.

He is very particular in relating the Differences, and *Prognosticks* of the *Small Pox*. If the Eruption is easy, and the Maturation comes on well, and the Feaver vanishes, no Danger: Otherwise, if the Feaver continues after the Eruption. It is a kindly Sort, when the Breathing is good, the Pulse regular, the Sense perfect, and the Patient can take Nourishment and Sleep. When the Pustules, containing a white Matter, are large, distinct, and few, and ripen without any great Feaver; and even though there be many, and in some Places confluent, yet if they are for the most Part large, and advance kindly, and if with this the Strength keeps up, and there be no Oppression or Burning, this is to be reckon'd none of the worst Sorts. But when they are thick and coherent, so that a great many of them make one by running

running together, when the Circle of these Clusters is very large, and the Appearance of them like Fat or Suet, when they run like an *Herpes*, or like what they call a *Formica*, corroding, ulcerating, and contracting the Skin; when they rise like *Warts*, and have no Matter in them, it is a very malignant Sort; especially, if after the Eruption they don't come on well, and the Patient be not reliev'd. If the Fever increases after the Eruption, an ill Sign: So a *new Crop* of Pustules, as it sometimes happens, shews a great Plenitude of Humours. The Sort is more kindly, when it is not attended with violent Redness; but if with great Paleness, dangerous. If the Eruption is made upon the *first* Day of the Distemper, it shews the Humours to be too brisk and impetuous: If upon the *third* Day, it denotes they are more temper'd and languid: If in the *critical* Days, by which I suppose he means the *fourth* and *seventh*, the Dis-

F 2 stemper

16 *An ACCOUNT, &c.*

temper is still milder. If there be great Pain in any Part, and that Part grows greenish or black, and the Strength fails, it is fatal. If the Pustules are extremely little, hard, of a violet, green, high red, or a black Colour, and don't come to Maturation, it portends ill: If they continue so throughout the whole Course of the Disease, if the Fever be not remov'd, and is attended with a *Syncope*, Sickness, or Trembling of the Heart, nothing to be expected but present Death. Thus far of the Symptoms and the Judgment to be form'd of the Event.

The Cure follows, and the better to judge of this we must always carry it in our Memory, that *Rhazes* liv'd and wrote in the warm Climate of *Persia*. He bleeds or cups immediately, even in Children: And if the Symptoms be violent, even to Faintness; otherwise, a less Quantity is sufficient. If a Vein in the Arm be not easily found, the *Poplitæa* may be open'd. The Room to be kept cool,

cool, all the Regimen to be cool likewise. *Ptisane* the Nourishment, and the Medicines chiefly *Troches* of *Spodium* (a good Absorbent) and the Juice of *Pomegranate*, and all other acid and astringent Plants. And the Rule in using this refrigerating Method must be with Regard to the intense burning of the Disease, and managed with that Moderation, as not to extinguish the natural Heat. At first he gives *Ice-water*, 'till the Patient vomits and sweats; then vaporates with warm Water; and this he reckons the most effectual Way to drive out the Pustules. So for Prevention and Preparation, he advises Bleeding, Swimming, using *Ice-water*, and all the coldest acid Diet, as the Juice of unripe Grapes, Salading, &c. He gives a Receipt made of Acids and *Spodium*, much in vogue among the *Indians*, who it seems affirm'd, that whoever us'd it would not have *ten* Pustules in the whole. The Body, if bound, to be kept *open*, by some Infu-

18 *An ACCOUNT, &c.*

Infusions taken *twice* a Day; this will make the Pustules fewer, and to be done, if the Distemper be violent. After the Eruption, strong purging to be avoided, especially towards the *Crisis*, for fear of a *Dysentery*; and too great a Flux is to be restrain'd. If Bleeding has been omitted in the Beginning, then gentle sweating and promoting the Eruption. If the Patient be hot and the Pustules do not advance, the *Decoction* with Figs, Raisins, Lentils, &c. to be constantly us'd. If the Disease be slight, and the Oppression little, and the *Small Pox* be out, *Coolers* not to be given to any great Degree, for fear of retarding the Eruption; but the *Decoction* to be continued, with some *Saffron*, &c. When they are all come out, Vaporations with Water. For Dilution, Water of *Barley*, *Pomegranates*, *Melons*, &c. and other temperate Liquors; and any thing, which more resolves the Humours, is less necessary, especially in the *Measles*. If the Oppression

sion be very great and near to a Syncope, dipping in cold Water and Friction to drive out the *Measles*, and to take Care there be not too great a Solution of the Fluids, or too profuse a Sweat. After the *fifth* Day (reckoning from the *first* Seizure) if the Pustules don't advance, use those Medicines which promote the Eruption. But this is to be done with Circumspection, and with Regard to the Symptoms; especially the Fever, which will be best judg'd of by the *Breathing* and the *Pulse*. But if the Pustules are hard and rough like *Warts*, and the Patient languid, it is to no Purpose to attempt any Maturation; for that cannot be done; such a State of the Disease being plainly pernicious. *Opiates*, above all Things, are proper in Want of Sleep, or in Case of a Looseness. The Body is open generally towards the End of this Disease, especially in the worst Kind. No Purging before the *Crisis*: But if need be, and the Body be dry, purge at the
Beginning,

20 *An ACCOUNT, &c.*

Beginning, and before the *Declension*: the *first* to abate the Heat, and beating of the Head; the *latter* to ease Nature of her Burden, and to carry off the morbidick Matter. This to be judg'd of either before or after *Bleeding*, by the Bodies being weakly, yet bloated and full of Humours; a lurking Feaverishness, and undulating Pulse. In this Case *Purging* answers best; but if the Mouth be bitter, if vomiting and great Inflammation, if the Throat is so stuff'd, as to endanger strangling, it is proper to *bleed*. The Directions are very full, which relate to *Gargles*, *Collyriums*, &c. and the preventing any Ulcers, or pitting from the *Small Pox*.

This is the Description *Rhazes* gives of the *Small Pox*; a very true one; though it does not minutely descend into Particulars: And for above five hundred Years it was thought so compleat, that succeeding Writers scarce added any
 Thing

Thing to it. 'Till at last, indeed, they came to distinguish the several Stages of this Distemper, and observe the very *Days* in each of them with great Exactness. However, even since that Time to our own, though the modern Authors have enter'd into a more precise Detail of the Appearances and the Symptoms, which attend this Disease, yet as far as regards the *practical* Part, we see here the Foundation of every Thing they have advanc'd. To instance in a few Particulars.

The *Arabians* have rightly distinguish'd between the *two* Sorts of *Small Pox*, and between each of them and the *Measles*: And have describ'd not only the *regular* Sorts, but have taken Notice of the *Anomalous* too. They have likewise observ'd, where one *Crop* has succeeded another.

At the Beginning, and sometimes even

G

after

22 *An ACCOUNT, &c.*

after the *Eruption*, they prescribe Evacu-
ations both by *Bleeding* and *Purging*.
And indeed they thought, that the good
or ill Event of the Distemper depended
so much upon the Treatment they us'd
at the *first* Seizure, or in the *first Days*
of it at least, that they are extraordinarily
careful and exact in the *Regimen*, which
they order to be extremely *cool*, as was
most proper and suitable in so sultry a
Climate as theirs was. Their Practice
surely was founded upon good Grounds:
though others have followed it in an ex-
travagant Manner, and even exceeded
what they did, in Nations, where nei-
ther the Nature of the Disease, nor the
Constitution of the Air requir'd it. Even
our Countryman *Sydenham* carry'd this
Notion to an Extremity in the *first* Edi-
tion of his Works: Though afterwards
he was so wise as to retract a great Deal
of what he had said, and came into the
moderate Method, as without Dispute
more

more agreeable to Reason, and to the Temper of our own Island.

We may observe, that their whole Management, both as to *Diet* and *Medicine*, in this Stage, ran upon *Dilution*; which they thought the most effectual Means to produce a kindly *Eruption*, and to keep the Pustules out. And as to this *last* Point, however *cooling* their Regimen in general was, they made no Scruple to use *warm* and generous *Cordials*, when Nature seem'd to want Assistance, or when they apprehended any Danger of their striking in. To the same End, when there was any great Disorder and Ferment in the Humours, which ought to be allay'd, or any terrible Symptom, which hindered the Maturation of the Pock, they had recourse to that sovereign and divine Remedy, *Opium*: A Remedy often us'd by them in this Case, though *Sydenham* seems to have been the *first*, who ever gave the least

24 *An Account, &c.*

Hint of such a Practice among our selves.

Here too you will find, that in the Declension of the Disease, when Nature has discharg'd all she can, and is ready to sink under the Load of the morbidick Matter, they took the proper Ways to relieve her by Art; and for that Purpose direct us, how to apply both *Bleeding* and *Purging* in such a Case of Extremity.

I don't doubt but the Reader will be well pleas'd with this Account of the *Arabian* Practice, with the Remarks of the learned Dr. *Freind*.

I can't take my leave of this *Arabian* Author without giving a Taste of his Notions in *Physick*, how this Art ought to be learnt, and how the Professors of it should be qualified. And as his Thoughts upon this Subject are new and purely
his

his own, it may, I imagine, gratify our Curiosity to have them related in the same Manner he has delivered them. I the rather chuse to give the following Character, because the judicious Physician before-mentioned, has thought it worthy of a Place in his elaborate History of Physick.

* P. 6.





C H A P. V.

*What Kind of PHYSICIAN is to be made choice of and approv'd. **

IT is highly necessary to be considered in the first Place, how, and in what Manner the Physician you intend to chuse, has employ'd his Time, and how he has spent it in his private Studies. If he has been very industrious in a diligent Perusal and Examination of the Books of the ancient Physicians, and has carefully read and compar'd their Writings, we may justly form to our selves a good Opinion of him. On the contrary, if we find he has spent the greatest Part of his Time in any Thing rather than in what we have mentioned; if he seems to be much delighted in Musick, Drinking,

* Ad Almanz. 4, 32.

and other ill Habits, we can entertain no great Opinion of him. But if 'tis evident he has been all along very studious, the next Point to be consider'd is, his Genius and Sagacity, whether he has been very conversant with Men able to dispute with and oppose him, and what just Grounds we have to think he will ever arrive to the Talents of enquiring into, as well as of curing Distempers: We ought to know in the next Place, what Time he has spent in the Conversation of those Persons we just now mention'd, and whether he has acquir'd by their Means the Art of judging of a Distemper, as well as relieving it. It will be material moreover to observe, whether he well understands what he pretends to have studied, or no; if we find he does, the next Enquiry will be whether he has been us'd to attend the Sick, and happy in the Cure of them. We ought to be satisfied, whether he has practis'd in popular Cities, where

where there are great Numbers of Patients, as well as of Physicians; and if upon Enquiry we find, that he is well qualified as to both these Particulars, we may safely pronounce him an able Physician, and to be made choice of before many others. But if it should be found, he were failing in one of these Qualifications, 'twere rather to be wish'd he were wanting in the *practical* Part; (I don't mean to be utterly unacquainted with at least some Part of it) than to know nothing at all of the learning of the Ancients. For he that is well vers'd in, and has well digested the Writings of the ancient Physicians, will, with a little Help of Practice, easily attain to what others, who are wholly Strangers to this Branch of Learning, can never be able to compass; those I mean who know little themselves, and owe all the little Knowledge they have to the long Conversation they have had with others, who have practis'd in Places, where

6

both

both Physicians and Sick do abound. But if any Pretender to Letters sets up for a Master, without having any Learning himself: or, if he has some smattering, understands little of what he reads, or at least has not arrived to the Use and Understanding of his Profession; such a one is not much to be relied upon, nor are his Abilities to be confided in. Neither is it likely for him to become a Proficient in his own Way. For 'tis not possible for a Man, though he lives to a great Age, to attain to this Part of Knowledge so considerable in itself, unless he treads in the Track of the Ancients; the Extent of this Science far exceeding the Bounds of human Life: and the same Thing is not in this alone, but in many other Professions. The Authors who have improv'd this Art are not a few, but they are not to be comprehended within the Compass of a few Years; a thousand Writers perhaps for a thousand Years have been improving this

30 *An* ACCOUNT, &c.

Art and Profession: And he that industriously studies those Authors, will, in the short Period of Life, find out as much as if he had liv'd a thousand Years himself, or employ'd those thousand Years in the Study of Physick. But if the Perusal of ancient Authors comes once to be slighted, what can any single Person find out, or what Proportion can his personal Abilities, though much superior to others, bear to the immense Treasures of the Ancients? In short, he that reads not the Books of the learned Physicians, nor understands something of the Nature of Diseases, even before he comes to visit; will, when he comes to attend the Sick, either through Ignorance, or Mistake, overlook the Distemper, because he does not before-hand understand any thing of it.





C H A P. V.

*A short DESCRIPTION of the
SMALL POX from Dr. Sydenham.*

I Shall next, in order to give a clearer Idea of the Disease, present the Reader with a short, but faithful Description from our famous Countryman Dr. *Sydenham*, whom the learned *Boerhave* calls the *English Hippocrates*, and says he has little to add to what he has so well wrote, but that it deserves to be *read ten Times over* *.

And Dr. *Freind* observes, that *Sydenham* has so fully and exactly treated this

* Boerh. cap: de Variolis. p. 30.

32 *A short* DESCRIPTION, &c.

Distemper, that he is justly preferable to all that have wrote on this Subject*.

There are two Sorts of *Small Pox*, says our † Author, the Distinct and Confluent (commonly call'd Flux'd) Pox. The first at the Beginning are attended with Chilness and Shivering, intense Heat, vehement Pain of the Head and Back, Disposition to vomit; in Adult Persons, with a great Propensity to sweat (from whence you may conclude, that they will not run together) a Pain under the hollow Part of the Breast if it be prest with the Hand, Dulness and Sleepiness, and sometimes *Epileptick* Fits (especially in Children) which if they come after the Breeding of Teeth is over, you may foretel that the *Small Pox* is at Hand; insomuch, that if the *Epileptick* Fit happens over Night, the Pocks

* Freind. Comment. p. 78. & 90.

† Syd. Processus integri p. 30.

will appear next Morning, and for the most Part of a mild Sort, and very rarely run together. On the *fourth* Day inclusively from the Beginning, and sometimes later, but rarely sooner, the Pocks break out, at which Time the Symptoms either abate, or entirely disappear.

At the first reddish Spots appear scatter'd over the Face, Neck, Breast, and the whole Body; then comes a Pain in the Jaws, which increaseth as the Pocks rise higher. About the *eighth* Day from the first Invasion of the Disease, the Intervals between the Pimples, which are hitherto white, begin to be red and swoln, and affected with a stretching Pain; the Eye-lids swell, and like blown Bladders cover the Eyes. Next after the Face, the Hands swell, and the Fingers are distended; the Pocks in the Face, which before were smooth and red, now appear rough (which is the first
Sign

34 *A short* DESCRIPTION, &c.

Sign of Maturation) and whitish: Moreover, they cast forth a yellowish Juice, in Colour not unlike a Honey-comb.

The Inflammation of the Face and Hands being now at the Height, the Intervals between the Pimples appear of a florid Colour, like that of Damask Roses, and the milder the Pocks are, so much the more lively do both they and the Skin between them express that Colour. The Pustules in the Face grow still rougher and yellower as they grow riper; but in the Hands and the rest of the Body, they daily grow whiter and less rough.

The *eleventh* Day, the Swelling and Inflammation abates, and the Pocks being arriv'd at their due Maturity and Bigness (which equals that of the greater Sort of Pease) wither and fall off. On the *fourteenth* or *fifteenth* they perish entirely; but those on the Hands are
of

of a more obstinate Nature; and being still white and fresh they continue a Day or two longer, after which they break; whilst those on the Face and the rest of the Body fall off in Scales, which in the Face are succeeded by Pits.

During the whole Course of the Disease, the Belly is either quite bound, or very rarely performs its Office. The greatest Part of those to whom this Disease proves mortal, die on the *eighth* Day in the Distinct, and on the *eleventh* in the flux Kind.

For when, in the first Sort of Pox, Sweating is promoted with Cordials, or a hot *Regimen*; on the foremention'd Day, the Face, which should be swoln and inflam'd in the Distances between the Pustules, on the contrary appears flaccid and whitish; whilst in the mean Time the Pocks are red and high, and even

36 *A short* DESCRIPTION, &c.

ven continue to be so after Death: That Sweat also, which had hitherto flow'd abundantly, suddenly disappears: The sick Person becomes light-headed, vehemently sick and restless, tosses his Body, makes little Urine, and often, and within a few Hours expires.

In the flux Kind the Symptoms are the same, but more violent: The Fever, Anxiety, Sicknes, Disposition to vomit, &c. do more cruelly torment the diseased Person; but there is not the same Propension to sweat, as in the other Kind. A Looseness sometimes comes before the Eruption of the Pocks, and continues a Day or two after, which scarce ever happens in the distinct Sort. On the *third* Day, or sooner, rarely later, they break out, and the sooner they appear, the more they run together.

Sometimes their Eruption is retarded till the *fourth* or *fifth* Day, by the Violence

lence of some Symptom, such, as (for Example) a Pain in the Loins, Side or Limbs, resembling the Stone, Pleurisy or Rheumatism; or in the Stomach with vehement Sickness and Vomiting.

The Symptoms abate not immediately after the coming out of the Pocks, as they do in the other Kind; but the Fever and the other Symptoms continue to afflict the sick Person many Days afterwards. Sometimes they break forth after the Manner of an *Erysipelas* or Rash; and sometimes like the Measles, but are plainly distinguish'd by the Time of the Eruption.

During the Progress of the Disease they do not rise to any considerable Height, but being intangled together in the Face, like red Blisters, they cover the whole Countenance, which swells sooner than in the distinct Kind. Afterward they appear like a white Skin glu'd to

38 *A short* DESCRIPTION, &c.

the Face, and are not much higher than the Surface thereof.

The *eighth* Day being past, the white Skin grows daily rougher by Degrees, and of a brown Colour. The Pain is more intense, till at last the Scales fall off, which in so cruel a Disease happens not till after the *twentieth* Day. This in the mean Time is worthy to be observ'd, that by how much nearer the ripening Pustules approach to a duskyish Colour, so much more dangerous are they, and disappear more slowly; but the yellower they are, they run the less together and vanish more quickly.

After the Skin is fallen off there appears no Roughness in the Countenance, but it is immediately overspread with mealy Scales of a very corrosive Nature, which leave Pits behind them, and oftentimes Scars. Sometimes the Skin of the Shoulders and Back comes off.

The

The Danger of the Disease is to be estimated by the Number and Frequency of the Pustules in the Face alone. Those that are in the Hands and Feet are biggest, and the higher you ascend from the Extremities of the Limbs, the lesser and narrower they grow.

In adult Persons Salivation, and a Looseness in Children (though not so certainly) accompanies the flux Kind. The Salivation sometimes begins at the Time of Eruption, sometimes two or three Days after, the sick Person spitting at the first a thin Matter, which on the *eleventh* Day grows more viscid, and is voided with great Difficulty.

He is thirsty, hoarse, extreamly dull and sleepy; the Cough sometimes surprises him as he drinks, and the Liquor returns through his Nostrils. Then the Salivation usually ceaseth, and unless the

40 *A short* DESCRIPTION, &c.

Swelling of the Face and Hands continues some Time after, the sick Person forthwith dies ; for though according to the Nature of the Disease, the Swelling of the Face should abate somewhat on that very Day, yet ought it not entirely to disappear till a Day or two after.

The *Diarrhæa* or Looseness surprizes not Children so early as the Salvation does Men. In both these Kinds of *Small Pox*, the Fever reigneth from the Beginning to the Time of the Eruption, from which to the Time of the Maturation of the Pustules it abates, and that being finish'd, vanishes.

The bad *Regimen*, or Government of the sick Person, occasions divers irregular Symptoms ; such as the Flaccidity and falling down of the Pocks, Phrensy, *Coma*, or perpetual Sleepiness, Purple Spots scatter'd between the Pustules, and little black Spots on the Tops of them,
subsiding

subsiding in the middle; pissing and spitting of Blood about the Beginning of the Disease, Suppression of Urine, &c.

The Separation and Febrile Ebullition are transacted in the first three or four Days. The Expulsion is perfected in the following Days, by means of little Abscesses arising in the Skin.

In the common flux Pox the Danger is on the *eleventh* Day from the Beginning of the Disorder; in a bad Sort on the *fourteenth*, in the worst Kind on the *seventeenth*, though sometimes, but rarely, they live to the *twenty-first* Day.

I have often wondred, that so exact a Writer as Dr. *Sydenham*, should never, as I remember, mention the *Pulse* more than once in all his Writings, a Sign so necessary to help us in forming a Judgment in acute Diseases; nor can I account for it otherwise, than that he
thought

42 *A short* DESCRIPTION, &c.

thought it impossible to be described. Give me leave on this Occasion to present the Reader with some Remarks from Dr. *Freind**.

Those, says he, that expect to excel in this our Science, must, as the great Masters in the Arts of Painting and Sculpture, have a Genius fit for their Profession. They must, like the Poets, in some Measure, be born with a happy Turn. For there are many Things in our Art so deep, so subtle and difficult, that they can never be explain'd; and after all the Knowledge a Physician can possibly obtain from the best Authors, there is still more left to his own Judgment and Penetration. And this is most evident in distinguishing the Variety of Pulses. For they that have this discerning Touch†, will perceive that they acquired it not so much by the Directions

* Ep. de Purg. p. 5.

† Tactum eruditum.

they receive from Books, as from a fine Genius and judicious Application*.

This was the Excellence of the late celebrated Dr. *Radcliff*, not a happy Guess as is commonly said, but a happy Judgment, and extraordinary Sagacity.

I wonder therefore Physicians have not amongst the *Diagnostick* Signs, taken Notice of an Irregularity or Fluttering†, in the Vibration of the Artery, which I have often observed at the Beginning of this Fever different from others; which they who understand the Variety of Pulses, may feel much better than they can describe.

* Freind Ep. de Purg. p 5. † Pulsus perturbatus.





C H A P. VII.

Dr. Sydenham's OBSERVATIONS
and METHOD of CURE.

THERE are two general Indications
in the Cure of the *Small Pox*.

First, To moderate the Fever and
Fermentation.

Secondly, To support by proper Me-
thods the Pustules.

As it is dangerous and imprudent by
a hot Regimen to raise the Fever too
high, whereby the Secretions are hur-
ried, and a crude Matter separated instead
of natural Eruptions; so on the contra-
ry, there is equal Danger in weakening
the

OBSERVATIONS, &c. 45

the Fermentation by Bleeding, &c. because by these Means the natural Separation of the morbid Matter from the Blood may be much hindered or disturbed, and a favourable Pox may be thereby changed into a bad Sort; so that if it can any Ways be avoided, we should forbear this Practice.

For by these Evacuations, the Fermentation, or Ebullition, whereby the Eruption is perform'd, is so lessened, that though the *Small Pox* appears favourable at first, yet in a short Time the Pustules recede, and fall on a sudden; because the Blood and Humours necessary to feed and support them, are taken away by the foremention'd Evacuations.

The great Judgment therefore is to preserve such a Degree of Fever as is proper to produce a compleat Eruption.

46 OBSERVATIONS, &c.

If that is too much increased or diminished, the Patient will be equally in Danger from either extreme.

In this nice Affair we must consider well the Climate, Season of the Year, the Age and Manner of Living of the Patient, the present State of the Distemper, and many other Circumstances, which not only exceed the Capacity of a Nurse, but require the utmost Care of a careful, as well as judicious Physician.

I am certain, the Eruption will be more compleat the longer Time Nature takes to separate the Pustules from the Blood; and we are thereby more secure that they will not return; whereas, if by hot Medicines the Pustules are protruded before the natural Time, a *confluent* instead of *distinct* Sort will be produced, often accompanied with *bloody Urine,*
purple

from Dr. SYDENHAM. 47

purple Spots, and other fatal Symptoms, especially in young Persons, and those of sanguine Constitutions.

He thinks it necessary to bleed young People, whose Blood is inflamed by hard Drinking, to prevent bloody Urine and Purples.

'Tis dangerous to promote Sweats in the Beginning, but he allows three or four Spoonfuls of warm Sack towards the End of the Distemper.

The great Advantages arising from Opiates are;

First, They cure the Anxiety, Restlessness, Watching, Disorders of the Spirits, and relieve or prevent a Phrenzy.

Secondly, They plump the Pustules, promote and Support the Swelling in

K 2 the

48 OBSERVATIONS, &c.

the Face and Hands, so necessary in this Distemper.

Lastly, Though they sometimes check the *Salivation* for a few Hours, yet I have often observed it prolonged thereby to the great Advantage of the Patient.

In the flux Kind a Looseness attends Infants, as a Salivation Adults. 7

By stopping this salutary Flux, he says, thousands of Children have been destroyed.

Dr. *Morton* on the contrary asserts, that a Looseness is generally prejudicial to Children, and checks the Progress of the Disease*.

[Certain it is, there generally is too

* *Morton Pyretol.* p. 203.

great a Quantity of the morbidick Matter in a bad Sort, to be carried off by the Glands of the Skin; and in such Case, the Evacuation by the Intestines is both a salutary and necessary Relief, as the Salivation is to grown Persons.

But if the Looseness is too violent, the Strength of the Child will be impair'd, and the Pocks fall, so that to moderate in this nice Circumstance, requires, and well deserves, the careful Observation of a judicious Physician: for the least Error in these Extremes may prove fatal to the helpless Patient.

The Management of this Symptom may seem an easy Affair to those that are unexperienc'd; but when they come to try, they will find it a Circumstance attended with great Difficulties; especially if occasion'd by *Worms*, which is often the Case of Children.

If that happens, all the common *Restringents* will be to no Purpose, unless Medicines to destroy the *Worms* are given at the same Time, which then often prove too late; and therefore, I always have a great Regard to them at the Beginning of the Distemper; and 'tis very happy for the little Patient, that *Spirit of Vitriol*, and *Bezoar Mineral*, the two *Medicines* I shall hereafter recommend, are excellent Remedies for this Purpose, as well as of great Use in the *Small Pox*.

I wonder these two excellent Writers, Dr. *Sydenham*, and Dr. *Morton*, should forget this Caution, and with Pleasure advise (because it may save many Childrens Lives) that instead of the common Preparations which are often useless, or mischievous, they would take Care to use proper Medicines against the *Worms*
of

from Dr. SYDENHAM. 51

of so dangerous Consequence in this Disease.

And I may venture to assure the Reader, that a gentle *Mercurial Purge*, with *Bezoar Mineral*, will do more Service in this Case, than all the preventing or preparatory Remedies generally recommended.]

In a violent Phrenzy, and Difficulty of making Urine, our Author advises to bleed immediately, and expose the Patient to the fresh Air; by which, says he, I have saved many.

When the Salivation stops, and the Patient is almost choaked by the Toughness of the Phlegm, he orders a Gargle, and strong Emetic or Vomit.

A cool Regimen, says he, will often relieve not only in a Phrenzy, but in a *Coma* and Purple Spots. But neither this
nor

52 OBSERVATIONS, &c.

nor any other Method he could yet discover would cure *bloody Urine*, or other *Hæmorrhages* in this Distemper.

The Depression, or Falling of the *Pocks*, requires Cordials, as a Looseness does at this Time, and Sickness and a Pain about the Heart doth at all Times of the Distemper.

In the *flux Pox* of the Year 1667, the *eleventh* was the critical Day. In the regular bad Sort of 1670, the Patient was in greatest Danger on the *fourteenth* or *fifteenth* Days. But in this worst Sort in 1675, the Sick died even after the *twentieth* Day.

He says, the *Small Pox* of this Constitution 1675, was more malignant than any he had ever seen, and the Methods which were used with good Success before, here availed nothing, for most of the Patients died.

I found

I found, says he, something else was wanting to resist this great Malignity; at last I bethought my self of *Spirit of Vitriol*, which I hoped would destroy this intense Putrefaction.

When the *Small Pox* was full out, the *fifth* or *sixth* Day, I ordered it to be instill'd in the Patient's common Drink, and to drink plentifully during the Course of the Distemper. This *Spirit*, like a Charm, moderated all the Symptoms*.

The Face swelled sooner, and much more.

The Skin betwixt the Pocks was of a fine damask Rose Colour.

* Symptomata omnia ad Miraculum fere compescebat. p. 347.

54 OBSERVATIONS, &c.

The Pustules which were small, filled and grew larger.

Those, which otherwise would have been black as Soot, became yellow.

The Face, instead of being black, was also yellow like a Honey-comb.

They ripened much sooner, which was another good Sign.

All these Things happened to those that drank a Quantity of small Liquor, acidulated with this *Spirit* of *Vitriol*; and to those that could not drink plentiful Draughts, I gave this *Spirit* frequently in Syrup, or Juleps.

I have mentioned a great many Advantages from this Remedy, and never found any the least Inconvenience thereby*.

* Ne minimum quidem Incommodi. p. 348.

For though the Salivation is towards the *eleventh* Day check'd by it, yet a few Stools at this Time make amends; for the Patient is then in less Danger from a *Diarrhæa*, than the *Salivation*, because the Phlegm is now often so tough and viscid, as to endanger choaking, which Symptom this Looseness obviates, and is easily stopt.

I should add, that by this Method the Face is generally secured from Pits.

Dr. *Sydenham* lays it down as a Rule, that the Danger in this Distemper is to be estimated from the Number of Pustules in the Face only. Dr. *Freind* is of a contrary Opinion, and thinks the Danger arises from the greater or less Number in the whole Body.

[If I may be allow'd to moderate betwixt these two eminent Physicians, and

56 OBSERVATIONS, &c.

give my Opinion, I should incline towards *Sydenham's* Observations, that a particular Regard is to be had to the Face in Prognostick; for this Reason, amongst others, because that Part is so much exposed to the Injuries of the Air, that the Pocks, during the Maturation, are more liable to be check'd or struck in, and consequently the Patient endanger'd, which I don't remember has been before observed.

On which Account, I have, before the Eruption, ordered Plaisters to the Feet, to make a Revulsion from the Head and Face, and preserve those principal Parts, by drawing a greater Quantity of the Blood, &c. to the Extremities, in order to separate the greatest Part of the morbidick Matter there.

D. J. Christianus Fermannus says, the best Preservative for the Face is frequently in the Beginning of the Distemper, to hold the Feet over the Vapours or
 Steams

from Dr. SYDENHAM. 57

Steams of a Decoction of emollient Herbs, by which means the lower Parts are softened, and the Skin and Vessels relaxed; and consequently, there will be a Derivation of a greater Quantity of the fermenting Blood and Pustules.

The Efficacy of this Practice is confirm'd by the Experiment of *Sylvius*, who says, if Childrens Feet are immers'd in hot Milk, the Face will be preserved, but the Feet will suffer Pain, be very tender, and full of the *Small Pox* *.

Baglivi says, he orders Sponges to be dipt in hot emollient Decoctions, and by applying them to the Hands and Feet, has given great Relief to the Patient †.

This Practice is recommended much by Dr. *Boerhave* ‡.

* Boneti Med. Septent. p. 226. † De Praxi Med. p. 62.
‡ Aph. de Variolis.

This Method is safe, and will be more successful than the Receipts often given to preserve the Beauty, and perhaps destroy the Patient; but I hope what I have said, will in some Measure prevent the trying Tricks with dangerous quack Medicines.

For Reason, as well as Experience, will convince considerate People, that the safest, as well as best Method of preserving both Life and Face, is to have a good Physician at the Beginning, to manage the Disease so as to procure a favourable Sort, and prevent or relieve dangerous Symptoms.]

Our Author, in his Epistle to Dr. *Cole* says; that Bleeding, however soon perform'd, does not cool the Blood so much as the breathing fresh Air. And I do religiously affirm, that almost the worst flux'd Sort that ever I saw, happened to
 a young

a young Woman, and kill'd her on the *eleventh* Day, who was just before cured of a *Rheumatism*, by the common Method of plentiful and frequent Bleeding.

From whence I first took the Hint that Bleeding was not so useful as I before imagined, to abate the Inflammation in this Distemper. Though I have observed, *Purging* in the Beginning made the *Small Pox* favourable *.

He allows a Child that has Epileptick Fits, forerunners of the *Small Pox*, to be put to Bed, have a Cordial, and composing Draught †.

Also, in violent Sicknes, Vomiting, Giddiness, &c. which are Signs of a flux Sort, he prescribes Bleeding, Vomiting, and *Spirit of Vitriol* ‡.

* Diff. Ep. p. 29. † p. 48. ‡ p. 53.

Though the Salivation, he says, is hindered by Opiates, yet they make large Amends by supporting the Strength, and the Swelling of the Face and Hands of the utmost Consequence at this Time of the Distemper*.

To moderate the Heat of the Blood, and the confused Eruption in the Beginning, and to check the Inflammation, and hurry of the Spirits afterwards, are the two great Points on which the Cure of the Distemper depends.

In a bad Sort of *Small Pox*, he at last discovered, that the second Fever at the *eleventh* Day should be treated as a putrid Fever.

He says many Persons are kill'd by Cordials, and more would die from a

* p. 69.

hot Regimen if they were not blooded, which otherwise is ufelefs and dangerous. For Bleeding is neceffary in this Cafe, though contrary to the Diftemper, (*licet per fe officiat*) as it disturbs and confounds the Separation, and leffens the Humours design'd to fupport and plump the Pocks *.

Sometimes, indeed, in his laft Pieces † he is fond of Bleeding before all Things, a ftrong Antimonial Vomit the fame Night, and by all Means to hinder the Patient from lying in Bed.

But being now grown old, and worn out with two terrible Diftempers, *Gout* and *Stone*; we ought to excufe his infifting too much on his favourite cool Regimen, and advifing Blood-letting, without Referve in the Beginning; as

* Pabulum deftinatum fubducit. p. 199.

† Sched. Monit. Procefs. integ.

62 OBSERVATIONS, &c.

perhaps he was too scrupulous about Bleeding and Purging at the latter End of the Distemper.

I have now, says the great *Sydenham*, given the Reader a full Account of my Observations on the *Small Pox*, which though a detracting Age may censure as a trifling Performance; yet I know very well, that I have been many Years in making them, not without much Labour and Care. Nor would I have publish'd my Thoughts, had not Charity to my Neighbour, and the Desire of doing Good, prevailed with me more than Self-Interest, and my own Reputation, which I know very well will suffer on Account of the Novelty of the Practice *.

[Having just given the Reader a View of our famous *Sydenham's* Doctrine of the *Small Pox*, I will now add Dr. Mor-

* Obs. Med. p. 352.

ton's Account of that Distemper. He was an eminent Physician in the last Age, and succeeded Dr. Sydenham.

But as the late ingenious Dr. *James Keil* has drawn the Characters of these great Physicians much better than I can pretend, what he says will be agreeable to the Reader, and may be useful to provoke us to imitate their Examples.

The first, says he, who excelled in a close and assiduous Observation of all the Appearances in the several Stages of a Distemper, was the divine *Hippocrates*, whose Delineations of Diseases are truly charming.

In them one may discern a wonderful Attention to all, even the minutest Operations of Nature, which produced a surprising Sagacity in judging of future Events.

64 OBSERVATIONS, &c.

In this Method several of the Ancients have followed him, but none ever came so near to him, as the deservedly renown'd Dr. *Sydenham*, and Dr. *Morton*, whose Histories of Diseases, for a full, exact, and nice Enumeration and Description of evident Causes, Signs and Symptoms; for a judicious Distinguishing of the several Species of the same Disease; and for just Prognosticks founded upon a careful Observation of such and such Appearances, have surpassed all Histories of the modern Physicians *.

* Keil. Pref. to Anim. Secr.





C H A P. VIII.

*Dr. Morton's ACCOUNT of the
SMALL POX, with the Di-
agnosticks and Prognosticks.*

DR. *Morton* divides the Distemper into four *Stadia* or Stages. The *first* is the Beginning of the Illness or Fermentation, in order to separate the morbi-fick Matter from the Blood by the subsequent Eruption. The *second* is a perfect or imperfect, compleat or incompleat Crisis or Eruption. The *third* is the Maturation. The *fourth* the Declination.

The Symptoms at the Beginning a general Chilness, as in intermitting Fevers, then shivering, yawning, &c. Afterwards feverish Heats, great Thirst,

66 *An Account, &c.*

Thirst, violent Pains in the Head, Back or Loins, Restlessness and Tossing about with Uneasiness, Sicknes, *Nausea* and Vomiting, Looseness, and lethargick Dullness,

Sometimes on the contrary, obstinate Watchings, Convulsions and Epileptick Fits, especially in Children; Cough and other Symptoms common in the Winter. A quick, strong, and great Pulse, weak or small, according to the Degrees of the Infection.

Violent Pains in the Head and Back, encrease of the Fever, and the foremention'd Symptoms, are Signs of an approaching Eruption.

The doubtful Characteristicks of Malignity in the first Stage, are too quick or too slow Eruptions, &c.

If the Fever has Exacerbations and
Remis-

Remissions; or however, if the Pulse is strong and equal, the Urine high coloured, with a large Sediment, these are Signs that Nature is strong; and though other Symptoms are bad, may hope for a good Crisis.

On the contrary, if the Malignity is fix'd on the Nerves, the Patient has no feverish Heats nor Thirst, the Urine pale and limpid, Hysterick Languors and Suffocations, Pulse quick, but weak, little Vomiting and Sickness, especially if Looseness or bloody Stools supervene, we may certainly conclude the Patient is in the utmost Danger.

If we add to these bad Symptoms, obstinate Wakefulness, or a profound Lethargy, if there are purple, livid, or black Spots, or crystalline Bladders on the Cuticle of the Neck or Breast, these are certain Characteristicks of approaching Death.

But as it requires great Sagacity and Skill in a Physician to judge in a bad Sort, where the Struggle betwixt Nature and the Distemper is dubious and uncertain, we will give the Reader our Observations confirm'd by much Experience.

And first of all the Pulse is to be examined carefully, for by that we make the best Judgment of the Strength and Vigour of the Patient.

A strong and equal Pulse, however terrible the other Symptoms are, denotes Strength of Nature and Spirits, to resist the Malignity of the Distemper.

On the contrary, a weak and irregular Pulsation of the Artery, though other Symptoms are milder, is always a Sign of great Malignity, and little Force
in

in the natural Powers to throw off the Infection.

Moreover, we must diligently observe whether the Strength of the Pulse encreases or diminishes towards the Crisis of the Disease; for then we can best judge of the Event in this doubtful Struggle of Nature.

The Urine is also of great Use to prognosticate in the Beginning of the Distemper: For if high colour'd and full of Sediment, it denotes a kindly Fever; but pale and clear Urine, especially if there is often Occasion to make Water, is a very dangerous Symptom.

A continual *Coma*, or Lethargy, violent and fix'd Pains in the Loins or Intestines, if there is but little Fever, are very bad Signs.

Violent Fluxes by Stools, *Hæmorrhages*, colliquative Sweats, not being able to Sleep, &c. generally preface a fatal Event.

But if about the Crisis the Pulse rises, if the Inquietude, Vomiting, *Nausea*, wandring Pains, Epileptick Fits, *Deliria*, and other Signs of Strength of Nature increase; if Fluxes, *Hæmorrhages*, colliquative Sweats, Wakefulness, and the Symptoms which weaken Nature decline, we may hope for a favourable Crisis, and a happy Conclusion in the Progress of the Disease*.

The second Stage of this Distemper is the Eruption, which is different, according to the Degrees of Infection.

In a favourable Sort after the Eruption

* P. 133.

from Dr. MORTON. 71

is over, which should begin on the *third* or *fourth* Day, the Fever and other Symptoms vanish, and all the Difficulty is soon over.

But in a malignant Sort 'tis a quite different Affair; the Eruption is too quick or slow, on the *first* or *second*, *fifth* or *sixth* Day.

When the Skin appears in an Instant spotted all over like an *Erysipelas* or Rash, interspersed with black Spots, without any Signs of Maturation; this is so fatal a Sort, I never knew any one live beyond the *second* Day of Maturation.

There is another Sort more common, though not less fatal, where the Face breaks out like a Rash, and the *first* Day of Maturation becomes like Parchment; in the rest of the Body the

72 *An ACCOUNT, &c.*

Eruptions are distinct, but irregular, and more like the *Measles* than *Small Pox*, and at last grow livid, and the Patient dies at the Beginning of the Maturation.

Sometimes they break out on a sudden very small, though not thick, and look as if the Person was stung with Nettles. These do not rise and fill, but on the Beginning of the Maturation flux, and appear like Parchment, tho' they are not quite so fatal as the forementioned: I seldom knew any outlive the *fourteenth* or *fifteenth* Day, unless by a long and troublesome Salivation, a great Flux of Urine, or much Swelling of the Hands and Face.

There are others that appear regular in the Beginning, but have crystalline Bladders, purple or livid Spots in the Interstices of the Pustules, especially in the Neck, Breast, and Trunk of
the

the Body, which are Signs of great Malignity in this Stage, and of a bad Fever, approaching *Delirium*, &c. so that the Patient is generally destroyed at the Beginning of the Maturation, by some unexpected Convulsions, *Coma*, or other fatal Symptom*.

The Diagnosticks of this Distemper in general at the Beginning, are taken from the Manner of Eruption and the Fever.

The kindly Sort may be felt in the Skin, distinct, round, of a lively Colour, and acuminated in *three* Days.

The middle or common Sort may be distinguish'd from a *Scarlet Fever* and the *Measles* by their Resistance to the Finger; from an *Erysipelas* by their Fi-

* p. 171.

74 *An ACCOUNT, &c.*

gure; from the kindly Sort by the different Manner of Eruption, and the Crisis of the Fever.

The bad Kinds give too melancholy Characteristicks of their Malignity to want any farther Description.

From what has been said, it appears in general what Event we may probably expect in the Disease. If the *Small Pox* is regular, by a proper Regimen the Patient is in a fair Way to do well. If Malignant, notwithstanding all the Assistance of Art, it generally proves fatal. If the middle Sort, the Event is doubtful, and it requires Prudence and good Management to save the Patient. So that it will be needless to say any more of the Prognosticks in this Stage of the Distemper.

Dr. *Morton's* Regimen and Method of Cure is generally too hot, as perhaps *Sydenham's* too cool: It is severely condemned

demned by a celebrated Physician *, therefore, by no means proper to be inserted in a Discourse, designed to give the Reader the justest Notions of the Distemper.

However, as he has given a great many Histories of Cases, a judicious Reflection on them may be very useful to Physicians, from whence they may learn to avoid the Rocks he split on.

* Mortonus dum in committendis cum Veneno morbo spiritibus animalibus totus est, ita calidissimis Alexipharmacis, Copiis, si Diis placet, contra Deleterium hostem auxiliaribus assidue pugnat, ut novas in sanguine Turbas cieat, & accendat quam reprimere debuit Febrem. Hinc illæ ipsæ, quas adducit, Historiæ palam faciunt, plerosque, quorum Curam habuit, Ægrotos aut excalefactos interiisse, aut saltem *οὐκ ἔτι πύργος* evasisse.

Mead Ep. ad Freind Comment. p. 120.





C H A P. IX.

OBSERVATIONS *on the* SMALL
POX *by* Dr. Freind.

MY Neighbour, Dr. Freind, in his Epistle * to Dr. Mead, gives a great Character of a late Book, wrote by Monsieur *Helvetius*, Physician to the *French* King, &c. That he has not only in general treated the *Small Pox* with Judgment, but that he alone has happily supply'd the Defects and Errors of most other Writers on that Subject.

As for Example, The distinct *Small Pox* is commonly reckon'd a nine Days Work of Nature, and so far from Danger, that there is no Occasion for As-

* De quibusdam Variolarum generibus Epistola.
sistance



C H A P. XI.

HISTORIES of CURES by
Dr. Sydenham.

A Gentleman of Distinction, Mr. *Elliott*, who was of the Bedchamber to the King, sent for me to one of his Domesticks, that was ill of a flux Sort of Pox, that would have soon turned *black*. He was eighteen Years old, of a sanguine Constitution, and got the Distemper by drinking. He had them fuller than any I had seen: I had an entire Confidence in this powerful Remedy, and would not have a Vein opened, though I came time enough, and otherwise ought to have done it. After the Eruption was over, I ordered large Bottles of Small Beer to be acidulated with *Spirit of Vitriol*, and that he should use

P

it

it for common Drink, and as often as he would. On the *eighth* Day he bled so much at the Nose, that the Nurse was frightened, and sent for me in haste.

When I came, I ordered him to drink more plentifully of the *Vitriolated* and Beer, by which the *Hæmorrhage* was soon stop't. He spit well, the Face and Hands swell'd, the Pocks rose, and every Thing went on well, except that towards the last Days of the Disease, he had some mucous Stools mixt with *Blood*. However, without any other Medicines than a composing Draught every Night, which I should otherwise have given, I mitigated the *Dysentery*, and when the Pustules were dry by Bleeding, and drinking Milk and Water, he soon got well *.

* Sydenh. p. 349.

from Dr. SYDENHAM. 89

Two other Histories of Cures by Spirit of Vitriol.

At the same Time, one of my Neighbours, Mr. *Clench*, desired me to take Care of two of his Children. One was four Years of Age, the other sucked, and was not six Months old. Both of them had the *black Flux Kind*, and came out like an *Erysipelas* or Rash. I gave both these Children *Spirit of Vitriol* in all their Drink, against which the *Age* of the little Infant was no Manner of Objection. Moreover, without any bad Symptom they both did well. My Friend Dr. *Mapletoft* visited them both, and was a Witness to the Cure *.

Dr. *Sydenham* says he found by repeated Experience, that *Spirit Vitriol*

* P. 351.

90 HISTORIES, &c.

was of great Use to abate a *Phrensy* or *Delirium* in continued Fevers*.

Dr. *Morton* † gives an Instance communicated by Dr. *Slare*, of bloody *Urine* in the *Small Pox* cured by *Spirit of Vitriol*.

* Obs. p. 333.

† Hist. 64. Sp. Vitrioli ad Phrenesin debellandam egregie contulit in Febre continuâ. Atque hoc reiterata Experientia mihi abunde constabat.



CHAP.



C H A P. XII.

*An extraordinary CASE from
Dr. Fuller of Sevennoke in
Kent.*

THE most remarkable Case that ever was heard of or seen in this Distemper, was performed by Dr. *Fuller*, which I shall give the Reader in his own Words*.

That I may the more amply illustrate the Efficacy of *chymical Acids* I'll communicate an Observation; which, tho' it may look incredible, yet is in every Part exactly true: And, for the Satisfaction of any that will enquire, I set down Place and Names.

* *Fuller's Pharm.* p. 268.

J. T. Coachman to Mr. *Dixon*, Recorder of *Maidston* in *Kent*, fell ill of a fiery fluxing *Small Pox*. The *tenth* Day, after Eruption, the Fever running high, he fell into a Phrensy, and bled at *Mouth*, *Nose*, *Eyes*, and *Ears*; his *Pocks* also all about his Body bled, and he made bloody *Urine*.

I chancing to be that Day at their Town, Mr. *Finch*, his Apothecary, consulted me. The Case seeming utterly desperate, I desired to be excused; but when he would not be denied, I order'd plentiful Bleeding, and a powerful Styp-tick and Paregoric. These availing nothing at all, we gave forty Drops of *Oleum Vitrioli* in a large Vehicle, and half an Hour after repeated the same. As soon as ever he had taken these, marvellous was the Alteration! After he recovered, he remembered he underwent Conturbations and Struggles unexpressible,

ble, and Dolours and Anguish so intolerable, that, he said, if it were to be done again, he should much rather die quietly, than endure such Pangs to save his Life.

But immediately all the Sluices of Blood were shut up; anon he slept, after awaked perfectly in his Senses, without any Fever; and from that Time gradually amended to a perfect Recovery.





C H A P. XIII.

Of BLEEDING.

WHEN the Fever runs high in the first Stage of the Distemper, when there is or seems to be a *Plethora* or Inflammation, or any Part is vehemently affected, as the Head, Back, &c. Physicians generally order a Vein to be opened, intending thereby to diminish the too great Quantity of Blood or Inflammation, by giving Room for a freer Circulation; and to make a Revulsion from the Parts affected. And as this Method is recommended by ingenious Reasonings, and the Practice of the most celebrated Physicians, and affords present Relief in the Agonies of a critical Eruption; I confess, that till lately, I had, I think, too great a Regard to the Fever and Inflammation, and treated this Disease like other

I

ther Inflammatory Fevers. But when I considered more carefully, and observed the Methods pointed out by Nature to relieve the Patient, I was convinced, that this particular Fever was a necessary Instrument to promote a salutary Crisis by the Glands of the Skin, and separate the infected Humours from the Blood.

Hence perhaps we may account for the Observations of *Helvetius* and Dr. *Freind*, that though a distinct *Small Pox* is generally reckon'd a nine Days Work of Nature, and to require no help from Medicines, yet they have often found by Experience, this Sort of Pox attended with dangerous and fatal Symptoms*.

The Reason I conjecture may be, that the Patient might not have Strength or

* Freind Ep. p. 5.

96 *Of* BLEEDING.

Fever sufficient to produce a genuine Eruption, and consequently, though all might be fair without, and the Pustules few, the variolous Matter remaining behind might fix on the *Throat, Lungs, Stomach* or *Intestines*, all which Parts have been found affected upon opening; and I believe, something of this Kind would generally appear where the Distemper proves fatal, if we were not averse to so useful an Examination.

I have often wondred, that Persons of Sense and Distinction, should oppose so reasonable and satisfactory Enquiry into the Cause of a Relation's Death, when they often are at a great Expence to embalm, that is, not only imbowel, but cut and mangle the Corpse in a terrible Manner.

Whereas the opening a Body, in order to inspect the distemper'd Parts, if done by a skilful Hand, is not dissecting,
but

but a fine Operation, and the Body is not at all defaced thereby.

Wherefore upon mature Reflection, and more careful Observation, I am apt to suspect that we have been mistaken, and shall beg leave to offer to the Consideration of better Judges, the chief Reasons that induced me to alter my Opinion, which I hope I shall never be ashamed to change for the better, especially in a Case of that Consequence, where the Life of a Patient may be concerned.

First, I considered, that the infected Particles ought to be separated from the Blood, and thrown on the Skin, because in a genuine and compleat Eruption, the Cause of the Disease is entirely evacuated; and consequently, the Fever must be a necessary Instrument of Nature to separate the corrupted Humours from

Q 2

the

98 *Of* BLEEDING.

the Blood, and promote a salutary Crisis.

Secondly, I reflected seriously on the following Observations of the judicious Dr. *Sydenham*.

The Eruption will be more compleat, the longer Time Nature employs in separating the peccant Matter from the Blood, if no violent Symptom prevents. It requires the Skill and Care of a good Physician to manage, so that the Fever neither rises too high, nor is too sluggish.

Bleeding, says he, promotes too quick an Eruption: And again, Bleeding and Evacuations ought not to be used if we can avoid them, because not only the Fermentation is too much lessened thereby, which is necessary to promote a perfect Despumation; but by these means the Humours are taken away, which should

should nourish and support the succeeding Pustules.

Hence he observes, the *Small Pox* which appear'd favourable, sometimes sunk and fell in on a sudden *.

In another Place, he says, many Persons are kill'd by Cordials, and more would die by a hot Regimen, if they were not blooded, which otherwise is useless and dangerous. For Bleeding is necessary in this Case of the Blood being inflam'd by hot Medicines, though contrary to the † Distemper, as it disturbs and confounds the Separation, and defrauds the Pocks of the Nourishment design'd to support and plump them ‡.

Again, he thinks it necessary to bleed young Persons, whose Blood is inflamed

* p. 188.

† Licet per se officiat.

‡ Pabulum destinatum subducit. p. 199.

by drinking, to prevent *bloody Urine* and *Purple Spots**.

Though some Years afterwards, when he experienced the wonderful Effects of *Spirit of Vitriol* to abate the Inflammation, he prefers that to *Venæsection*, in a Case where the Indications were plain for Bleeding†.

In his Epistle to Dr. Cole, he ingenuously confesses, that he did not think Bleeding, though ever so early perform'd, abated the Inflammation so much as fresh Air. And I do religiously affirm, says he, that almost the worst Sort that ever I saw, and which killed on the *eleventh* Day, happened to a young Woman just cured of a Rheumatism, by the common Method of plentiful and frequent Blood-letting. From hence he took the first

* p. 196.

† Vid. supra p. 87.

Hint, that Bleeding was not so useful as he before imagined*.

It is remarkable, that *Fernelius*, Physician to *Henry II.* though a *Frenchman*, forbids Bleeding in the *Small Pox*, and other malignant Fevers, because he says the Blood is thereby made more liable to the Infection, and the Strength being impaired by this Evacuation, is less able to resist the threatening Contagion†.

This says he is confirm'd by Experience, and therefore instead of Bleeding, &c. he orders *Acids* to strengthen the Blood, and *Alexipharmacks* ‡.

Dr.

* Diff. Ep. p. 29.

† Sanguis Phlebotomia concitatus promptius labem contrahit, quemadmodum Aqua cui Fellis tantulum injeceris, si agitur, ocyus quam si consistat amarescet. Quinetiam vires vacuatione immixtæ, insipienti pernicipi minus obsistunt. *Fernel. de Morb. Pestilent. Lib. 2. Cap. 12.*

‡ Non quæ vacuent, sed quæ frigore & adstrictione levi, spiritus, sanguinem & humores cohibeant

Dr. *Lifter* says it is not proper to bleed in this Distemper, unless to relieve some violent Symptom, and observes, that in *bloody Urine* or *Purples*, the Fibres of the Blood are so broke, that they can't coagulate and separate from the *Serum*.

The learned *Boerhave*, speaking of the bad Symptoms which often attend a Suppression of the *Lochia*, as *Phrensy*, *Pleurisy*, *Quinsie*, *Dysentery*, *Cholick*, &c. observes that in treating those dangerous Symptoms, we should have the greatest Regard to the original Cause of the Disorder, and says we must not

hibeant, reprimantque; cujusmodi est mali punici, citrei & uvæ acerbæ succus, viscosusque persimilis: tum quæ Venenæ vires aut obturant, aut hebetant, aut foras s. dore exterminant. *Id. ib.*

bleed

bleed, even in such Symptoms, but in extreme Necessity*.

Thirdly, Hence I concluded, that Bleeding ought not to be used in the Beginning, unless in Cases of Necessity; because contrary to the Nature of the Distemper, and might prove of dangerous Consequence to the Patient.

Fourthly, I considered, that it required great Skill and Attention to distinguish a real from an apparent Necessity, a symptom from an original Cause †.

* Cuncta hæc eradicantur sponte, radice mali excisâ.

Neque curanda symptomata proinde ac si essent Morbi acuti sui generis.

Venæsectio haud facilè, nec nisi urgente summâ Necessitate adhiberi potest. *Boerh. Aph. de Morbis Puerp.*

† Ægritudinis magnitudo & virtutis Robur potissimæ sunt intentiones venæ incidendæ. *Æsii de re Med. lib. 3. p. 113.*

R

Thus

Thus for Example, the Blood will be rarified by the Fever and Fermentation and consequently take up more Room, and distend the Vessels; from whence, and the Acrimony of the Infection, may proceed violent Pains in the Head, Back, &c. so that I am afraid we are often in this Case deceived, by thinking this temporary Plenitude requires Evacuations, which ceases as the Fever abates, after the Separation of the morbidick Matter from the Blood.

Coroll. Hence perhaps we may account, not only for the subsiding or sinking of an apparently favourable *Small Pox*, but also why the Eruption is incomplete, and the Crisis imperfect.

Because by improper Evacuations the Eruption may be check'd and disturb'd, and we may so weaken the Patient, that there will not be sufficient Strength
left

left for the natural Powers to protrude the morbid Humours on the Glands of the Skin, and consequently, it will be no wonder, that the Infection remaining behind, should produce terrible Symptoms in the Progress of the Distemper.

But suppose there was a real *Plethora*, and Bleeding should not diminish the Strength or Vigour of the Constitution, perhaps the Blood may be more infected thereby; that is, the Cohesion of its Parts may be altered by so sudden an Evacuation, and consequently be made more susceptible of the spreading Contagion, and therefore I would rather advise *Cupping* or *Leaches*, &c.

They who think Bleeding is only of Use to empty the Vessels are no Judges of this Affair; but I believe every good Physician knows, that 'tis often prescri-

106 *Of* BLEEDING.

bed to alter the Quality of the Blood, when vitiated, and make it yield more readily to the Force of proper Remedies.

If therefore we can by this Method make the Blood susceptible of the good Effects of Medicines, I fear it will be more liable at this Time to receive bad Impressions from the prevailing Infection.

What is here advanc'd seems to be agreeable to the Experience of the best and ancient Writers, who forbid opening a Vein in pestulential, or malignant Fevers.

Coroll. 2. Hence it appears how much they are mistaken who advise Bleeding by way of Preparation or Prevention *;

* Cavendum ne in secunda Valetudine adversæ præsidia consumantur. *Celsus.*

whereas

whereas this Method in all Probability may introduce the Disease from an infected Air, and render the Blood more obnoxious, and less able to resist the Malignity of the Distemper.

Coroll. 3. 'Tis also evident, if we do bleed, how necessary it is at the same Time to give Medicines that preserve and invigorate the Crasis of the Blood, as *Spirit of Vitriol*, &c. in order to guard against the Inconveniences consequent thereon.

Sixthly, But as I don't pretend to oppose my Practice to the Experience of the rest of the Profession, so I would not willingly have my Arguments answered without any Reason but a bare Assertion, that they have found Bleeding useful in the Beginning of this Distemper. For that is the present Question in debate, and if they appeal to Experience, I would beg the Favour of these Gentlemen

108 *Of* BLEEDING.

lemen to consider the vast Disproportion there is in the Numbers of those that have been blooded, and the common People that pass through this Distemper without that Operation, which is generally the Case of those that are left to the Womens Management. I know very well, that the latter are generally more healthy, and their Blood less corrupted, and consequently they have the Distemper more favourably.

Yet the visible Marks, Multitudes of these retain in their Faces, besides frequent Experience, evince the Danger they have undergone from the Malignity of the Disease, as well as their Betters; and therefore is an Argument, that Bleeding is not always necessary, even in the worst Sort of *Small Pox*.

Nor indeed can I conceive how this Evacuation can be more useful to those of a weak and delicate Texture, than the

the others that are of a vigorous and sanguine Constitution.

I will only add, that though Bleeding is often attended with ill Consequences, the Symptoms that are thought to be relieved thereby, though terrible, are not so dangerous as many others.

For Example, a high Fever, great Pain in the Head, Back and Loins, Inquietude, Sickness, and violent Vomitings, *Delirium*, Watchings, Convulsions and Epileptick Fits, are not such bad Signs, as generally imagined: These violent Symptoms, I say, if attended with a strong, though quick Pulse, shew a Strength in Nature, and are often reliev'd without Bleeding, which no Body can be ignorant of, who has observed this Distemper amongst the more ordinary People, or when left to the Nurses Management.

But

But the Difficulty is how to manage *Hæmorrhages*, *purple*, *livid*, or *black Spots*, where the Fibres of the Blood are broke, and the Globules have lost their Attraction, and Cohesion, and a Mor-tification is beginning. Bleeding I fear will hasten Death; at least, I may venture to say, is not so proper as Preparations of *Vitriol* and *Opiates*.

Again, If the Spirits are much affected by the Malignity, if the Patient has no feverish Heat, nor Thirst, the Pulse, though quick, low and weak, and perhaps unequal, Urine pale, &c. to procure a tolerable Eruption, *Hic Labor, hoc Opus*.

No Physician, I believe, would think of Bleeding in this malignant Case, but would rather prescribe *Alexipharmicks*, *Cordials* and *Volatiles*, with *Camphire*, *Blisters* and *Opiates*, to support and raise
the

Of BLEEDING. III

the Spirits, and compose those nervous Disorders, &c.

To conclude this Head, though Bleeding is in my Opinion generally improper in the Beginning, at least, as Dr. *Freind* says of *Purging*, *multas habet Cautiones*, and requires the Judgment of a prudent and experienced Physician to determine; yet, I own, in bad Cases we find it frequently necessary, especially towards the Conclusion of the Distemper; and then we must not be too scrupulous in Regard to particular Days, but prescribe according to the Exigency of the Symptoms*.

The famous Sir *Theodore Mayerne* advises, in Difficulty of Breathing, when the Patient is in Danger of being suffo-

* Siquidem Medicina non ad Temporis mensuram, sed ad Morbi momenta accommodari debet. *Ep. de Purg. p. 19.*

112 *Of* BLEEDING.

cated in the latter Part of the Distemper, or in an *Erysipelas* that swells the Head, to apply immediately *Leeches* to the Neck, or open the Veins under the Tongue, which will bleed so freely, that he cautions to have a Styptick ready; and he says, by opening these sublingual Veins, the Countess of *Bedford*, almost dying, lost above twelve Ounces, the Countess of *Carlisle*, a greater Quantity, (besides many others which he omits for Brevity sake) both which Ladies, when they recovered, acknowledged that they owed their Lives to this *Phlebotomy*.

I hope, from what has been advanc'd, no Body will be so malicious as to insinuate, or so weak as to imagine, that I allow of Bleeding, &c. when the Indications are plain or urgent; since he would act like a mad Man rather than a Physician, who whilst he used his best Endeavours to drive the Gout into the Extremities,

Of BLEEDING. 113

tremities, if the morbidick Matter should be translated into the Head or Lungs, and produce an *Apoplexy*, *Coma*, or *Peripneumony*, should neglect the proper Relief of these violent Symptoms.





C H A P. XIV.

WE often find contrary Indications, but must chiefly regard the most urgent and dangerous Symptoms. Thus I remember several Years ago, an old Practitioner in the Country, let an antient Lady die of a Lethargy, because she had at the same Time a violent Dropsy. I told her Daughter, who consulted me, that she might probably be saved some few Weeks (which was of Consequence to the young Lady, Quarter Day being near) by Bleeding, Blisters, and proper Remedies, that chiefly regarded the Lethargy, which was apparently the most dangerous Distemper. But the old Doctor insisted, it was contrary to his Practice to bleed on any Account in a confirmed Dropsy, &c.

Thus

Thus a Man * may practise, and practise all the Days of his Life, and yet be never the wiser for his Experience, if he neglects to make the proper Observations, which that Experience might suggest to him: And it is not very likely he should be over nice in his Observations, who constantly goes on in his first Track, and has no other Scheme, but his own narrow Notions in his View; whereas the Searcher of Authors has the Benefit of other Mens Experience together with his own; and it is from the Joint-concurrence of these, that we can hope for any considerable Advancement in Knowledge. Were it not for this, the oldest Practitioner would always be the best Physician: And there would be little or no Difference, even as to the scientific Part, between an old Nurse, and the most regular Professor *.

* Freind Hist. of Physick Vol. I. p. 338.



C H A P. XV.

Of C U P P I N G.

IF there is a real *Plethora*, unless the Blood is fizy and viscid, I should advise to *Cupp*, or apply *Leeches*, rather than open a Vein, because by this Method the Indication of lessening the Quantity of Blood may be answered, without the Danger of ill Consequences often attending a sudden Evacuation from larger Vessels, *viz.* diminishing the Strength of the Patient (for we order Cupping when the Patient is too weak to open a Vein) besides disturbing the Secretion, a necessary Work of Nature at this Time, and inducing perhaps such a Confusion and Alteration in the Cohesion of the Blood, as may weaken its Crasis, and make it more susceptible of the Infection.

I re-

I remember the learned Dr. Mead*, speaking of Crises in Fevers, advises carefully to observe by what Kind of Secretion Nature endeavours to carry off the Distemper, and that we should not be too officious, especially at this Time, lest we should disturb the Motions of Nature. Again, They that are used to observe the Advantages arising from natural Crises, too little regarded at present, will know how easy and how dangerous it is to disturb Nature in this critical Work.

Baglivi, an eminent *Italian* Physician, advises to observe Nature, and not by improper Medicines disturb the natural Motions.

If, says he, about the *fourth* Day there is great Inquietude or Convulsive Motions, I presently order the Patient

* De Imp. Solis & Lunæ. p. 69.

118 *Of* CUPPING.

to be cupp'd on the Back, by which Revulsion I have often taken off the bad Symptoms, and the *Small Pox* came out favourable *.

I find *Mercurialis* gives the Preference to Cupping in this Distemper.

But I am much confirm'd in this Opinion, by the Authority of the famous *Celsus*, who orders Cupping (as all good Physicians do) where the Patient's Strength will not admit of opening a Vein, and advises it as a less violent and safer Remedy; nay, he allows it in those Circumstances of a Fever, where he thinks Bleeding extremely dangerous. And here I beg leave to be indulg'd the Pleasure of vindicating the Memory of this Prince of the *Latin* Physicians, who was not only oppress'd by the Envy of his own Times, but when the Learning of *Greece*,

* Bag. de Praxi. p. 64.

again revived, from the Obscurity occasion'd by the Inundations of barbarous Nations, this *Latin Hippocrates*, as an excellent Writer observes, alone remained in the Rubbish of Oblivion *.

And when, though late, he was rais'd from the Ruins of the common Calamity, there were not wanting learned Men still to detract from his Character as a Physician; for why? Because it seems he wrote excellently of military and country Affairs, as well as of Philosophy and Physick, and of all these in the purest and most elegant Stile.

Just as if Posterity should not allow Dr. *Freind* to be an eminent Physician, because he wrote *Classick Latin*, and

* Unicus videatur isti Calamitati superesse Celsus, Autor, siquis alius, ut excellentissimus ita summâ contra sæculorum pene omnium depressus Invidiâ. *Lommii Com. Pref.*

was a Member of Parliament. The Folly of this way of judging puts me in mind of those who fancy a formal Appearance, and pedantick Behaviour, denotes a good Physician, as they sometimes deny that Character to others who converse like Gentlemen, and do not seem concern'd that their Friends are in Health, and have no Occasion for Physick.

As the Writing this little Treatise has furnish'd me with uncommon Reflections on this Subject, I am apt to think, that using a temperate Bath and Friction in the Beginning, might be of Advantage to the Patient; because the Skin, if dry, would be thereby suppled, and made more soft, like Childrens, to whom the Distemper is most favourable: Besides that, Perspiration would be encreased, and become more free on that Account; the Lensor obstructing the capillary Vessels attenuated, and perhaps the violent Pains

in

in the Back, Loins, &c. relieved, as we find our selves refreshed this Way, after the Fatigue of a hard Journey. Since I wrote this, I have been confirm'd in this Notion by the famous *Boerhave*, who advises to relax the Skin with Fomentations*.

But this being a Practice entirely new, I shall leave it as a Hint to be considered by my Brethren the Physicians.

* Clysmatibus fotibusque laxetur tota Cutis, &c.
Aph. de Variolis.





C H A P. XVI.

THE famous *Galen*, in his Epistle to *Posthumus*, tells this remarkable Story of himself, That being call'd to a young Gentleman of Distinction, in Consultation with some of the most celebrated Physicians in *Rome*, they had agreed to bleed him immediately, in which, says he, they judg'd right, there being no Contra-indications.

But by carefully examining the Symptoms, and considering the Prognosticks of the great *Hippocrates*, I foresaw an approaching natural Crisis, and therefore told all the Physicians, that if they would have a little Patience, Nature would relieve it self by a critical Evacuation from the *Nose*; and I added, that they should
soon

soon see a Quantity of Blood issue from the *right Nostril*. They wondred at my Prognostick, and laughed at the Particularity of it. But when the Patient's *Nose* began to bleed, as I foretold, soon after I spoke this, and there being a great Clamour, all the Doctors, you know, ran away in Confusion *.

Galen values himself much on this Prognostick; he and our great Master *Hippocrates*, knew very well the Advantages arising from natural Crises, beyond artificial Evacuations.

Every judicious Physician will know how to apply this History in parallel Cases, and it will be of no Use to explain it to others.

This puts me in mind of a Story

* 'Εφ' ᾧ μέγιστος κραυγὴς, ὡς οἶδ' α, ἤραμ' ἔτι, οἱ μὲν ἰατροὶ πάντες ἔφυγον. Chart. Ed. Tom. 8. p. 851.

we find in *Elmaceni*, taken Notice of by Dr. *Freind* in his History of Physick*.

When the Chaliph *Rasbid* was seiz'd with an *apoplectick* Fit, *A. H.* 180. and the Physicians were called together to consult what to do, the Son of *Backtishua*, an ingenious young Physician, proposed *Bleeding*. *Mahomed Alamin*, *Rasbid*'s eldest Son, protested against it; but *Almamon* the youngest, interposing and saying, since the Physicians give him over, and unanimously are of Opinion that he will die, what hurt can there be in *Bleeding*? Perhaps he may recover by it, and without it he must certainly perish. He was accordingly let Blood, and immediately recover'd, and from that Time had a greater Fondness for *Almamon*, and constituted *Backtishua* his Physician, with the annual Salary of

* Part 2. p. 12.

a hundred thousand Drachms. We see how raw these Physicians were in the *Greek Learning*, and how the vulgar Notion run against Bleeding: But as the Judgment of this Physician was perfectly right upon this sudden Occasion, it may afford us a proper Reflexion, and put us in mind, how much upon the watch we ought to be in some Cases of Extremity, not to neglect the only Remedy, which possibly can be of any Use, and without which all other Applications must be in vain.

By the Way we may learn from hence, that the Doctrine of *Predestination*, which so much prevails among the modern *Turks*, did not make any deep Impression upon the Minds of this People in these early Times: The Sequel of this History will let us see, that they were far from thinking the Term of Life fixed; and that as they never neglected

to

to make use of all human Means to prevent or cure Diseases, so accordingly they gave as great Encouragement to the Professors of this Art, as ever any Nation did.





C H A P. XVII.

Of SPIRIT of VITRIOL, &c.

I Shall comprehend under this Head the several Preparations of *Vitriol*, but those which I chiefly recommend are, *Sp. Vitriol*, *Ol. Vitriol. dulc. Tinct. Antiphthif. Tinct. Rosar.* and in some Cases *Elix. Vitrioli.*

The two first I generally Use, but the *Tinct. Antiphthif.* is the most powerful Styptick, if given in a sufficient Dose.

These Medicines have been rejected by many, because they are Styptical, that is, encrease the Cohesion of the Blood, and consequently preserve the Globules from Dissolution by the Infection, and therefore I think of great Use in the Disease.

Riverius has * an excellent Observation, which well deserves our serious Consideration. *Lentils*, says he, have been rejected by several of the *Moderns*, because they are restraining, and they fancy on that Account hinder the Eruption of the *Small Pox*.

But we ought not rashly to reject the Authority of so many great Men in the Profession, but rather to conclude (which is not at all unreasonable) that *Lentils* and *Gum Tragacanth* moderate the Inflammation, and violent Ebullition of the Blood, by their restraining and incrassating Qualities.

If therefore the Fever and Ebullition rise too high, these are profitably used; if the Fever is too sluggish, and the Humours too viscid, we should prescribe at-

* De Prax. Med. cap. de Variolis.

tenuating Medicines, Cordials, Diaphoreticks, &c.

Whence it follows, that we ought not rigidly to insist on the Forms of Remedies delivered by Authors, but must vary our Prescriptions according to Reason, and the different Circumstances of the Case.

Give me leave to add an Observation, That *Tare* Posset Drink is no contemptible Remedy, though chiefly and universally used by the ordinary People.

If therefore the Fever and Inflammation are great, is it not safer to prescribe some Preparations of *Vitriol*, which strengthen the Blood at the same Time, and abate the Inflammation, &c. Or is it not better to endeavour to remove the Obstructions in the capillary Vessels, which occasion the Fever, by *Bezoar Mineral*,
U 2 and

&c. than to advise Bleeding, which often weakens and impoverishes the Blood, and is contrary to the Nature of the Distemper?

The Instances I have given from *Sydenham*, &c. have plainly demonstrated the powerful *Effects of *Vitriolick* Medicines, when the Malignity of the Distemper was apparent, but 'tis not so easy to shew the great Use of this Remedy in the Beginning to prevent dangerous Symptoms; because it may be suggested, that the Disease would otherwise have been favourable.

But those who are Judges, know that bad Symptoms before Eruption, necessarily produce a dangerous *Small Pox*, unless relieved by Art; and those who consider this Affair, will see plainly, that a Medicine which can correct the Malignity of the Pustules after the Eruption,

* See p. 87, &c.

when the Blood has been much corrupted, will more easily subdue a small Quantity of Infection in the Beginning.

However, though the Physician has not Justice done him, the Patient, which is of more Consequence, will find Advantage from this Method of Proceeding.

I would not be understood to recommend this as an universal Remedy; for I well know there are different Sorts of *Small Pox*, and therefore have often shewn the Necessity of having a judicious Physician, who will observe carefully the Nature of the Disease, and vary his Prescriptions as the different Symptoms require.

However, I may venture to say, that this Remedy may often supply the Place of Bleeding; at least where that is thought proper, this will generally be found to do great Service.



C H A P. XVII.

Of BEZOAR MINERAL.

AS I can't find that this Medicine has been used in this Distemper by our *English* Physicians, nor in other Fevers, so much as I think it deserves; and as the Effects of an *Alterative* Medicine, are not apparent to any but those who are Judges; it can't be expected that I should give plain Instances of its good Effects.

But as the Consideration of the Nature of the Ingredients, and its Efficacy in other Fevers, induced me first to try it on this; so in a Disease that will not yield to the common Methods, I should think the same Reason should move my Brethren to observe carefully its Operation,

Of BEZOAR MINERAL. 133

tion, and improve it to some good Purposes. For indeed we should act Empirically and without Reason, if we did not sometimes deviate from the common Road, and vary our Medicines, as the Exigency of the Case requires.

There are six great Remedies, perhaps of more Use and Efficacy in Physick, than the whole *Materia Medica* besides.

I mean *Mercury*, *Antimony*, *Vitriol*, *Opium*, *Steel*, and the *Cortex* or famous *Peruvian Bark*.

The two first enter into the Composition of *Butter* of *Antimony*, a violent Caustick, from which, by the Help of Fire, and a strong Acid, is made *Bezoar Mineral*, a safe as well as an efficacious Remedy.

This Medicine is generally given as a
Sudo-

134 *Of* BEZOAR MINERAL.

Sudorifick, but will operate gently by Urine, and insensible Perspiration, as well as Sweat, according to the Disposition of the Humours, or as it is joined with *Diureticks* or *Diaphoreticks*. And as it thus scours the Glands, is a powerful Deobstruent, and which is extraordinary, promotes Sweats, and cures a Fever, without encreasing the Heat; that is, removes the Obstructions in the capillary Vessels, and restores a free Circulation. On this Account 'tis an excellent Medicine in some chronical as well as acute Diseases.

Dr. *Bates*, chief Physician to King *Charles II.* gave it generally as an *Alexipharmick* in malignant or pestilential Fevers, which has been the Practice of most Physicians.

Sylvius, a Physician of no mean Reputation, advises, after the Eruption of the *Small Pox*, to give *Ant. Diaphoret.* or *Bezoar Mineral*, to carry off the Impurities

purities that may remain in the Blood, through the Pores of the Skin, and to promote the Maturation*.

But the famous *Riverius*, an excellent *French* Physician, not only used this Medicine with great Success, in pestilential Fevers, but also gives two remarkable Instances of Cures in the *Small Pox*, where this was the principal Remedy.

One was a very bad Sort, the Pustules depress'd and pitted in the middle, and some turn'd black †. The other was a Child, dangerously ill, and but

* Post Eruptionem Variolarum bonum est uti Ant. Diaph. vel Bezoard. Min. quo quicquid adhuc admistum est sanguinis massæ propelletur ad Corporis superficiem, vel per poros Cutis è Corpore. Horum Medicamentorum Ope promovebitur Variolarum maturatio & exsiccatio Pustularum. *Fr. de le Boe Sylvii, Praxis Med. Lib. 4. Cap. de Variolis.*

† Variolæ in facie & toto corpore depressæ & in medio concavæ, imo nonnullæ in medio erant nigræ. *Riv. Obs. p. 98.*

136 *Of* BEZOAR MINERAL.

twenty-three Months old; to whom he gave half a Scruple of *Bezoar Mineral* every *third* Hour till it recovered ‡.

He also used this Medicine in the Measles, and in malignant Fevers with great Success *.

The great Difficulty in Physick is to discover the Nature of the Disease, and know how to apply proper Remedies to relieve, or eradicate the present Disorder, or immediate Cause of the Distemper.

Hence it will appear how much they are mistaken who trust to the Advice of an old Doctor or Apothecary, only because they have been long used, as they call it, to their *Constitutions*; whereas,

‡ Cent. 4. p. 11.

* Prax. Med. p. 234 & 476.

every Body that knows any thing of Physick, must be sensible, that there is a great Deal of Difference betwixt being used to a Constitution, and understanding it; that Constitutions alter daily, and when a Person is ill, the Judgment is to find out the present Constitution, or State of the Disease, and be able to prescribe proper Remedies, which he that is the best Physician is most likely to do, tho' he never saw the Patient before; provided he takes Care to enquire whether the Patient has any Idiosyncrasy, or natural Antipathies, and if any particular Medicines disagree, which is all that is properly meant by a particular Constitution, and may soon be learnt from the Apothecary, or any Person that is well acquainted with the Patient.

Besides, in these acute Distempers, the Symptoms often change, and what was proper in the Morning may be improper in the Evening, so that the Phy-

138 *Of* BEZOAR MINERAL.

sician must alter his Prescriptions as the Symptoms vary, and the Exigency of the Case requires.

The best Remedies therefore are useless, or perhaps dangerous in unskilful Hands, and a Physician can no more communicate his Skill to those who are ignorant of the Foundations of his Art, than a Painter can teach them to draw after the Life, or to distinguish Originals from good Copies.

It has been very much the Custom of late Years amongst notable People, to buy Medicines much cheaper than they can really be made, by which their Pockets, as well as Health, often suffer in the End, since the cheapest, as well as safest Method of curing Diseases, is to give a few good Medicines adapted to the Case. And therefore 'tis very necessary to observe, that great Care must be taken to procure this Medicine genuine, which
being

being little used, is more likely to be adulterated, by which means it either proves Emetick, or such a Powder as the Chymist pleases, and of no Manner of Efficacy.

And this may be the Reason why some ingenious Physicians have conceived an indifferent Opinion of so excellent a Remedy.

For as a very good Judge of Medicines observes, the Prices of many Things the Wholesale Apothecaries and Chymists sell, are under what the Expence of making them genuine amounts to; inso-much, that a Person must be very easy about his Patient, who can trust to any Thing from them. And here it would be a Crime to forbear a Piece of Justice to the Company of Apothecaries, who, to avoid these crafty Impositions of the Chymists, have supply'd a joint Stock
for

140 *Of* BEZOAR MINERAL.

for making all Chymical Medicines, under their own Direction and Care ; whereby they are certain of having every thing in this Branch genuine, and in Perfection, from the Elaboratory at their Hall *.

* Quincy Pharmacop. Pref.



CHAP.



C H A P. XIX.

OBSERVATIONS, &c. *on the*
S M A L L P O X.

THE Reader will easily perceive, that though I have chiefly confined my self to the Beginning of the Disease, yet I have carried this Enquiry so far, as to endeavour to discover the best Methods of procuring a compleat Eruption, which is indeed the whole of this Affair, and the great Crisis of the Distemper.

I considered this would give me an Opportunity of explaining in the shortest Manner the Nature of the Disease; for if we can manage so happily as to procure a perfect Crisis in the Beginning, all the Danger is over: However, if Na-

142 OBSERVATIONS, &c.

ture is not able by the Assistance of Art to throw off the Malignity by a compleat Eruption, the other Stages of the Distemper are Symptomatick, and could not be properly illustrated without mentioning particular Cases, which would be too tedious and laborious a Work, for one who was sufficiently tired, and had scarce Patience to go through the Fatigue of Writing this small Treatise.

From hence I hoped to offer some Improvements in the common Practice, and to shew the Danger of neglecting good Advice in Time, from the ill Consequences of Mistakes at first, which often prove irretrievable in the Progress of the Disease.

I also reflected, that the Danger in the Beginning was often not apprehended till too late, as this Part of the Distemper was least understood, and less regarded;

ed; and therefore I thought some useful Observations and Cautions on this Head, would probably be of some Service to the Publick.

The judicious Author of the History of Physick says, That any Book in our Faculty, which affords good Observations in Practice, which gives a Description of any new Distemper, or some remarkable Case, or a new Method of Cure in an old One, deserves to be look'd into by those, who would make the proper Advantage of other Mens Experience. Nay, I shou'd not think that I advanc'd a Paradox, if I said, that a very indifferent Performance in Physick, may now and then at least be worth the cursory Perusal of a Physician; both as it employs his Thoughts in his own Way, and as it must in the Course of Reading give him constant Hints, how far and in what Manner this or that Particular relating to Theory or Medicine may be

Y improv'd;

144 OBSERVATIONS, &c.

improv'd; and even sometimes might start an Occasion of striking out something new of his own*.

If the Reader reaps any Advantage from these Observations, I should be guilty of vile Ingratitude, if I did not acknowledge my Obligations to the Memory of a deceased Uncle, the late learned Dr. *Phineas Fowke*, an excellent, as well as eminent Physician. To whom I not only owed the Determination to a Profession, that gives me much Satisfaction, but a great many useful Instructions whilst he lived, and after his Decease a Library of Books, which was an inestimable Treasure to a young Physician; on Account of his numerous Remarks, confirming what was just in the best practical Authors, and pointing out the Rocks they sometimes split on.

And these Observations were so valu-

* Freind's Hist. of Physick Par. 2. p. 32.

able,

able, because they were not made in a Hurry of Business, or before he was Master of his Profession; but after mature Reflection and Recollection, when he had left great Practice, and was retired to his Country Seat. And therefore, I often remember what Dr. *Mead* told me, that these Books would be of more Use to me at that Time, than the Libraries of all the Physicians in Town.



CHAP. XX.

Dr. CADE'S EPISTLE to
Dr. FREIND.

I Will now, to make amends for the Imperfections of this Essay, present the *English* Reader with the late Dr. Cade's excellent Epistle *, which though chiefly design'd to confirm the Doctrine of *Bleeding* and *Purging*, in the last Stage of the *Small Pox*, will afford a better Idea of the Disease than can be easily met with.

In the flux Sort, says he, whilst the Swelling of the Face and Salivation continue, we must by all means abstain from *Bleeding* and *Purging*, as when a *Phleg-*

* Freind Comment. p. 12.

mon or Boil is ripening; least these Evacu-
ations should hinder the Separation of
the morbidick Matter from the Blood by
the Pustules, which at this Time is the
chief Business of Nature. For 'tis a Phy-
sician's Duty to assist, not to disturb Na-
ture.

Moreover, in the Progress of the Di-
stemper, if the Swelling of the Face and
Salivation decrease on the *ninth, tenth,*
or *eleventh* Day, as usual, yet if the
Hands swell, and no bad Symptoms ap-
pear, in my Opinion we ought not yet
to *bleed* or *purge*, but leave the whole
Affair to Nature. However, in this State
of the Distemper, I often prescribe a
Clyster to empty the Bowels, and re-
strain the Violence of the Fever.

But if on the mention'd critical Days,
the Swelling of the Face vanishes, and,
which too often happens, neither the
Hands swell, nor are the Pustules full of
Matter,

148 *Dr. CADE's EPISTLE*

Matter, from whence the morbid Particles, corrupting the Mass of Blood, occasion a violent Fever, with Difficulty of Breathing, Inquietude, and obstinate Wakefulness, notwithstanding *Opiates*: I say, if the Patient is seized with these terrible Symptoms, the Physician ought by Bleeding and gentle Purges, to carry off the peccant Humours.

Lastly, in a flux Sort, though the Face and Hands swell as they ought, and that Salivation goes on well, yet when the *Ptyalism* ceases, and the other Parts subside, if (as it often happens) a bad Fever with Difficulty of Breathing, Watching, Restlessness, and pale Urine, still attend the Patient; in this Case 'tis necessary for the Physician to lessen the Quantity of Blood, that the remaining Part may circulate more freely; and he should also, by frequent Purges, evacuate the morbid Matter, which has now no Passage through the dry and crusted Pustules. For if we neglect

neglect these Evacuations, the forementioned Symptoms encrease and become fatal, or the Patient, by the Humor fixing on the Lungs, soon dies of a Consumption.

At this Crisis there is scarce a worse Symptom in the Disease than Difficulty of Breathing, which Bleeding happily relieves, and indeed in that Case is the only Remedy. Tho' when this Symptom is urgent, if we do not make haste, it will be too late.

But though Bleeding relieves difficult Breathing, yet 'tis so far from restraining *bloody Urine*, that it encreases it, and hastens Death.

Yet I have by *Camphire*, and large Quantities of *Acids*, preserved those who have had this fatal Symptom for some Time; though indeed, I must confess, that I never knew any one that made
bloody

150 Dr. CADE'S EPISTLE

bloody Urine in the *Small Pox*, survive
the *sixteenth* Day after the Eruption.

In Difficulty of Breathing I am not frightened from Bleeding, even by a low and weak Pulse, because I have often observed the Artery to vibrate stronger afterwards, which shews, that the Lowness of the Pulse was owing to Oppression, not Weakness. However, in so bad a State of Affairs, 'tis better to try a doubtful Remedy than none at all.

This Distemper is inflammatory, and the Way to cure it, is to moderate the Ebullition or Fermentation of the Blood, and promote the Separation of the putrid Humour, and expel it by the Pustules. For whilst the Fever rages, and the Circulation is too much hurried, Nature can't separate the morbid Particles from the Blood, and protrude them through the Habit or Skin; which must be done gently, and by Degrees.

But

stance from Art; but, says he, Experience and *Helvetius* testify the contrary, for this Sort is sometimes not without Malignity, and a dangerous Fever.

Helvetius and other Writers have taken Notice of the *Crystalline* Sort, where the Pustules, like Bladders, are fill'd with a sharp *Serum* instead of *Pus* or Matter, and are commonly called *white Hives*.

But none, except Dr. *Freind*, has observ'd this bad Symptom in a distinct Sort of Pox *.

He mentions another Sort, which he calls *Siliquosæ* or Husky; and a third, which were hard like Warts †.

[This puts me in mind of an extraordinary Case I had about eight Years ago,

* p. 8.

† Verrucae. p. 9.

80 OBSERVATIONS, &c.

which being very remarkable, I beg leave to mention it.

Miss *Swinnerton*, a Child of about five Years old, had *three* different Kinds of Pustules. Besides the common Sort which fill'd with Matter and Scabb'd, she had some that continued smooth, and evaporated gradually, leaving the Pellicle that enclosed them shrivelled. She had a *third* Sort, which may properly be called Husky, for they dropt out of their Sockets at the Declination, as an Acorn or Nut out of its Husk.

I remember I got this Patient through the Distemper with a few Medicines and Care, without any bad Symptoms.]

Dr. *Freind* sometimes has observed, contrary to the common Opinion, a distinct Kind, (where there has been many Pustules) attended with a Salivation.

[*Sydenham*

[*Sydenham* also observed the same in the irregular *Small Pox*, which turned black, *Anno* 1670, 71, 72.

He advises not to be confident of Success, because even this distinct Kind is sometimes attended with Symptoms, that will elude the Skill of the best Physicians.

He observes, that the Method of Cure must be varied, according to the *Indications*, and that they are much mistaken who treat ALL alike.

That a particular Regard must be had to the Pulse, which some too much neglect, and others, though they feel it all their Lives, are never the wiser*.

The same Regard is to be had to Respiration.

* p. 17.

A *Delirium* before the Eruption is of no great Consequence, but happening afterwards is a fatal Symptom.

He says, *Hæmorrhages*, as bloody Stools, Urine, &c. which sometimes happen in this Sort of *Small Pox*, are the most dangerous Symptoms in this Distemper*.

He gives several remarkable Instances, which shew the Malignity of this seemingly favourable Kind of Pox.

* Species Variolarum longe teterrima, p. 19.





C H A P. X.

OBSERVATIONS *on the* SMALL
P O X.

'TIS a great Misfortune that Dr. *Freind*, who has wrote so well on this Subject, should have been so sparing of Cases, and chiefly treated the latter Part of the Disease, having too modestly left, as he says, the much greater Province to his Friend Dr. *Mead*, and often solicited him to a Performance of what he was so very capable.

It were much to be wished, that these Gentlemen, who are perfect Masters of the Subject, would oblige the World with the best Observations, which either an Acquaintance with the ancient Writers,
or

84 OBSERVATIONS, &c.

or a happy and extensive Practice can suggest.

Let it suffice for one whose Ambition is rather to be useful to Mankind, than to make a Figure*, that he has carefully consider'd the Subject, and communicated what he thought might be useful in the Distemper; as well as endeavoured to make some Improvements in his Profession.

Nor would I have taken the Liberty to mention the Mistakes of others, who well know I am too liable to Faults my self, had I not thought it necessary to the Preservation of the Patient; a Consideration, I hope, I shall always have Regard to, above Complaisance to any Person, and even my own Interest.

* PRODESSE QUAM CONSPICI.

Perhaps

Perhaps it may be objected, that by explaining this Distemper so fully, I may teach those that are not qualified to Practice, to avoid some Errors, and to manage the Disease with more Caution and Judgment; and thereby do an Injury to my Profession, which is already invaded more notoriously than all others.

To which I give this short Answer,

That on the contrary, they who consider this Discourse, will find the Management of a bad *Small Pox*, attended with so many insuperable Difficulties to those that are not good Judges in this Affair, that if they have any Modesty or Understanding, they will be deterr'd from undertaking a Province so much above their Capacities.

For 'tis want of Knowledge, and being inform'd of the Nature of Distempers

86 OBSERVATIONS; &c.

stemper, which makes People Quacks; as we daily see, the most ignorant and impudent of Mankind often pretend to some extraordinary Skill in the Practice of Physick.



But when there is too great a Quantity of morbid Matter to be thrown off by the Pustules, the Physician ought to assist in purging away the corrupted Humours.

This Evacuation is plainly indicated: For in the flux Sort, provident Nature substitutes a Salivation to help off the great Quantity of Humour, which could not pass by the Pustules. But in Infants, who are not able to spit much, a *Diarrhæa* or Looseness supplies the Place of a *Ptyalism* or Salivation, and is equally necessary to preserve their Lives; so that they who stop this Evacuation, do certainly kill the sick Child.

Since therefore in Children the abundant Matter which could not be carried off by the Pustules, is evacuated by Stool, I think a Physician does not act absurdly, when in Imitation of

Z

Nature.

152 Dr. CADE's EPISTLE, &c.

Nature, he purges away the peccant Humours, which could not be protruded through the Glands of the Skin.

It follows therefore, that in an imperfect Crisis of a bad *Small Pox*, *Bleeding* and *Purging* are often necessary to save the Patient.

This is not only agreeable to Reason but Experience, and I have known several Peoples Lives saved by this Method of Practice.





CHAP. XV.

RECAPITULATION.

I Have in several Parts of this Essay attempted to make some Improvements in the Management of this Disease. And supposing I have been mistaken, the Design was both honest and laudable, to make my Profession more useful and beneficial to the Publick.

To this End I have laid before the Reader the best Authors, and best Methods of Practice, in order to set this Affair in a true Light, which may serve as a Foundation to my Brethren to discover my Errors, or to introduce a more effectual Method of Cure so much wanted in this Distemper.

154 RECAPITULATION.

I shall therefore make a short Recapitulation of what I have observed most remarkable, and leave it to the Consideration and Improvement of every judicious and unprejudiced Physician.

First, I have shewn the great Difficulties which occur in this Distemper, and the many Qualifications requisite in a Physician who undertakes the Management of it†: From whence will appear the Unreasonableness, as well as fatal Tendency of some vulgar Errors.

That Physicians do more harm than good in the *Small Pox*.

Or that a good Nurse is better than a Physician.

Whereas the Truth is, they are both

* Chap. I & II.

RECAPITULATION. 155

necessary *, and there is more than enough for them to do in a bad Sort, as it will exercise the utmost Sagacity and Prudence of the most judicious Physician, as well as the greatest Diligence and Circumspection of the most skilful Nurse; who therefore, instead of disagreeing, ought to unite in using their best Endeavours to preserve the Sick committed to their Charge, in so nice and difficult a Case.

Secondly, I have given necessary Cautions in Relation to the Management of Children that are troubled with *Worms* or *Fluxes* †, an Affair of great Consequence to them in this Distemper.

Thirdly, In the same Chapter ‡ I have

* ——— Ego nec Studium sine divite Venâ
Nec rude quid profit video Ingenium, alterius sic
Altera poscit Opem res & conjurat amice. *Hor.*

† p. 48.

‡ p. 55, &c.

mention'd

156 RECAPITULATION.

mention'd the Danger of using quack Remedies to preserve the Beauty, and have shewn the best Methods to preserve both the Face and Life of the Patient, by making a malignant *Small Pox* more favourable.

Fourthly, I have mention'd several Arguments * which deterr'd me from the common Practice of *Bleeding* in the Beginning of this Disease, and offered some Reasons to prefer *Cupping*, if it was necessary to lose Blood, and have given some Hints about the Necessity of *Bleeding* sometimes at the latter End, before the Times commonly thought proper.

Fifthly, I have endeavoured to revive a famous Medicine; † which, though discovered the latter End of the last Century, happens already to be disused. And I have given an Instance of its Efficacy.

* p. 97, &c.

† p. 53, 87, 127.

RECAPITULATION. 157

cy, by the greatest and most amazing Cure that ever was perform'd in this Distemper*.

Sixthly, I have advised the Preparations of *Vitriol* instead of *Bleeding* in the first Stage of the Distemper: Because a Remedy which can resist the Contagion when the Mass of Blood is infected, will with more Ease and Certainty abate the Inflammation, and destroy the Putrefaction in the Beginning.

Seventhly, In Imitation of our famous Countryman, Dr. *Sydenham*, I have took the Liberty to introduce a *new Medicine*†, which from a serious Consideration of its Composition, and a careful Observation of its Effects, may, I am persuaded, be found of great Use in this, as well as other *malignant, putrid, and inflammatory Fevers*; and therefore well deserves the

* p. 91.

† p. 132.

158 RECAPITULATION.

Consideration of our Physicians. And I am more fond to recommend it, because it is as safe as efficacious.

Lastly, I have represented to the Readers the Danger of neglecting this Distemper in the Beginning, that they might take Care to have good Advice before it is too late, and have shewn what Kind of Physicians follow the Steps of our great Master *Hippocrates*, and are most capable of doing them Service. I have given a View of the Distemper from the best Writers, and perhaps have offered more Hints for the Improvement of the common Practice, than will be generally found in much larger Books.





C H A P. XXIII.

The CONCLUSION.

IT may be very useful to observe, by way of Corollary, from the foregoing Discourse, that *Bleeding*, &c. plainly appear to be great Remedies, and of the last Importance in this Disease; as a proper Use of them is necessary to the Preservation of the Patient, and an improper Application may be attended with fatal Consequences: And this Observation is as true in other dangerous Fevers, though the Mistake is not so evident.

For many Persons are destroyed by these Evacuations, which, if rightly timed, might have saved their Lives; so dangerous is the Error of those, who think, if the Patient is *blooded, vomited, blyster-*

A a ed,

160 *The* CONCLUSION.

ed, &c. all is right, and they have nothing to answer for. On the contrary, so many have suffered by hearkening to unskilful People, who are fond to advise, and pretend to much Judgment in Physick (since most People above *forty* are wise enough to be Physicians) that I think my self obliged in Charity to give a Caution against shedding innocent *Blood*, &c.

I mention this with more Satisfaction, because our College, as formerly, can still boast of Physicians as much superior to other Nations, as the Native Freedom, Riches and Liberality of the *English*, on all Occasions, exceed the Countries round about us. 'Tis from these Encouragements that Gentlemen are educated in the Profession, a Science too noble and extensive for narrow Souls to imake any Progress in, or attain to any Degree of Perfection. Besides, that it would be imprudent, as well as unsafe,

The CONCLUSION. 161

to trust the Secrets of Families with any but Men of the strictest and most unquestion'd Honour.

I shall only add, that having chose to express my self in the most plain and intelligible Manner, in order to make this Essay more useful, I have not been solicitous about Beauties of Language or Diction, nor indeed is this a proper Subject for that Purpose*.

Many ingenious and well disposed Physicians have been discouraged from communicating their Observations to the World, because 'tis very easy and too common to find Fault, though exceeding difficult to write well; for which Reason, a judicious Critick says†.

*Let those teach others who themselves excel,
And censure freely who have written well.*

* Res ipsa doceri contenta ornari nolit. *Freind Ep.*

† *Pope's Essay on Criticism.*

64 The CONCLUSION.

'Tis to be hoped therefore, that the candid Reader will consider the Usefulness of the Design, and pardon the Inaccuracy of Style, and some careless Expressions; which must needs happen in a Discourse wrote at leisure Hours, and in loose Papers: Since I have taken a great Deal of Pains to avoid the Errors in the common Practice, and have endeavoured to make the Profession more beneficial to Mankind.

I shall conclude with two celebrated Lines of *Horace*, in his Epistle to *Numerius**.

*Vive, vale. si quid novisti rectius istis,
Candidus imperti: si non, his utere mecum.*

* *Hor. Ep. lib. I. 6.*

F I N I S.